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PUBLICATIONS

OF THE

FIELD COLUMBIAN MUSEUM

ZOÖLOGICAL SERIES
VOL. VIII.

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FIELD COLUMBIAN MUSEUM

PUBLICATION NO. 115

ZOÖLOGICAL SERIES VOL. VIII

A CATALOGUE

OF THE

COLLECTION OF MAMMALS

IN THE

FIELD COLUMBIAN MUSEUM

BY

DANIEL GIRAUD ELLIOT, SC. D., F. R. S. E., &c.
Honorary and Supervisory Curator of the Department.

CHICAGO, U. S. A.
1907.

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PREFACE.

The present Catalogue purports to give the names and the number of specimens of Mammals in the Field Columbian Museum up to the date of issue. When the Author took charge of the Department of Zoölogy, as constituted in this Institution, the collection of Mammals was composed of a limited number of mounted examples furnished by the Ward Natural Science Establishment of Rochester, New York, many of them not freshly prepared, and nearly all with unreliable data of locality, causing them to be practically of little scientific value specifically, but useful to a certain degree as representatives of genera. There were no mammal skins, and consequently a study collection did not exist. At the present time a fair start has been made, and about fifteen thousand specimens are now in the Museum collection, the major portion, as is proper, being unmounted and reserved for scientific study and comparison. Knowing that the value of a museum's material depends greatly upon how much is available for scientific research, it has been the Author's policy to restrict the number of mounted specimens to as few as would give a proper conception as possible to the visitor, of the Order, Family, and usually the species, represented. To go beyond this would be but the production of useless repetitions, wearying to the observer and profitable to no one. Naturally, when beginning the formation of a collection, the material nearest at hand was sought, and consequently the mammalian fauna of the United States occupies the largest portion of the Catalogue. The Author has not, however, been unmindful of exotic forms, and as many foreign species have been procured as possible, rather special attention having been given to Wild Horses and African Antelopes,— important and beautiful creatures advancing rapidly toward extinction. Although purchases have been liberally made, yet by such means the making of a collection would be necessarily slow and unsatisfactory, for the main dependence for achieving success and a collection at the same time is, of course, work in the field. The expedition to Africa under the Author's leadership produced large results, and numbers of valuable specimens were secured, the majority being various species of Antelopes. By keeping collectors constantly at work, mostly thus far in North America, it has been possible to bring together a sufficiently large number of specimens to constitute a nucleus for the grand collection it is hoped the Museum may eventually possess, and cause it to take

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its position in the front rank of the great world-embracing Institutions devoted to the scientific study of Natural History, and whose influence is felt and recognized throughout the earth. In the exhibition of mammals much attention, and, it may be added space also, has been given to groups, and specimens of single species of different ages and sexes have been brought together and placed in a miniature landscape of the country in which they once dwelt. Their environment was thus the natural one. When practicable this is the most satisfactory method of exhibiting specimens; but it is limited, for no matter how large the museum building may be, only a very small portion of a collection could be so arranged, and if continued to any excess, other and equally important exhibits could not be shown. Mounting specimens in groups, therefore, must from sheer necessity be always limited.

Every example in the Museum that has passed through the Author's hands is contained in this Catalogue, together with all the information possessed regarding it; commencing with the sex, whether collected, purchased, presented, or exchanged, followed by the locality in which it was taken, the person or institution from which it was procured, ending with the name of the collector. The signs and abbreviations used are: ♂, male; ♀, female; Coll., collected; P., purchased; Pres., presented; and Exch., exchanged. The arrangement is that of the Check-List of Mammals of the North American Continent and West Indies, as far as that work goes, viz.: for the mammals of the North American fauna, the exotic species being relegated to their various positions in accordance with the system of classification adopted by the Author. One species is described, a bat, *Uroderma validum*, on page 538, the discovery that the specimens represented a new form having been made too late for the Author to avail himself of any of the usual channels of publication and include it at the same time in the present work.

In conclusion, it gives me much pleasure to acknowledge my indebtedness to Mr. W. J. Gerhard, Assistant Curator of Entomology, for his valuable aid in reading the proofs as the work passed through the press, and also for constructing the index, in which task considerable help was rendered by my assistant, Mr. E. B. Chope.

D. G. E.

December, 1906.

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CLASS MAMMALIA.

SUBCLASS I. PROTOTHERIA.

Order I. **Monotremata. Monotremos.**

Family I. **Ornithorhynchidæ.**

Genus 1. **Ornithorhynchus. Duck-bill.**

Ornithorhynchus Blumenb., Götting. Gelehr. Anz., 1, Apr. 19, 1800, p. 609. Type *Ornithorhynchus paradoxus* Blumenbach= *Platypus anatinus* Shaw.

Platypus Shaw, Nat. Misc., x, 1799, text to pl. 385. (nec Herbst, 1793. Coleopt.)

1. Ornithorhynchus anatinus (Shaw).

Platypus anatinus Shaw, Nat. Misc., x, 1799, pls. 385, 386. *Id.* Gen. Zoöl., 1, 1800, Pt. 1, p. 229, pls. 66, 67.

Ornithorhynchus paradoxus Blumenb., Voigt's Mag. Naturk., II, 1800, p. 205

Dermipus anatinus Wiedem., Archiv f. Zool., Pt. 1, 1800, p. 180, pl. III.

Ornithorhynchus fuscus Péron & Lesueur, Voy. Terres Austr., 1807, pl. XXXIV.

Ornithorhynchus rufus Péron & Lesueur, Voy. Terres Austr., 1807, pl. XXXIV.

Ornithorhynchus brevirostris Ogilby, Proc. Zoöl. Soc., 1831, p. 150.

Ornithorhynchus crispus Macgilliv., Mem. Wern. Soc., VI, 1832, p. 128.

Ornithorhynchus lævis Macgilliv., Mem. Wern. Soc., VI, 1832, p. 132.

Ornithorhynchus anatinus Gray, List Spec. Mamm. Brit. Mus., 1843, p. 191. Thomas, Cat. Marsup. & Monotr. Brit. Mus., 1888, p. 388.

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DUCK-BILLED PLATYPUS.

1. Adult — P. Australia. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult — P. Australia. Ward's Nat. Scien. Establ., Rochester, N. Y.

Family II. **Tachyglossidæ.**

Genus 2. **Tachyglossus. Echidnas.**

Tachyglossus Illig., Prodr. Syst. Mamm. et Av., 1811, p. 114. Type *Myrmecophaga aculeata* Shaw.

Echidna G. Cuv., Tabl. Élém., 1798, p. 143. (nec Forster, 1788, Pisces.)

Echinopus G. Fisch., Zoogn., III, 1814, p. 691.

2. Tachyglossus aculeatus (Shaw).

Myrmecophaga aculeata Shaw, Nat. Misc., III, 1792, pl. CIX. *Id.* Gen. Zoöl., I, Pt. I, 1800, p. 175, pl. LIV.

Ornithorhynchus hystrix Home, Phil. Trans., 1802, p. 348, pls. X-XII.

Echidna hystrix E. Geoff., Cat. Mus., 1803, p. 224.

Echidna australiensis Less., Man. Mamm., 1827, p. 318.

Echidna acanthion Coll., Forh. Vid. Selsk., 1884, No. 13. *Id.* Proc. Zoöl. Soc., 1885, p. 148, pl. X.

COMMON ECHIDNA.

1. Adult — P. New South Wales. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Tachyglossus aculeatus setosus (E. Geoffroy).

Echidna setosa E. Geoff., Cat. Mus., 1803, p. 226.

Echidna breviaculeata Tiedem., Zool., I, 1808, p. 592.

Tachyglossus setosus Illig., Prodr. Syst. Mamm. et Av., 1811, p. 114.

Echinopus setosus G. Fisch., Zoogn., III, 1814, p. 694.

HAIRY ECHIDNA.

1. Adult — P. New South Wales. Ward's Nat. Scien. Establ., Rochester, N. Y.

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SUBCLASS II. METATHERIA.

Order II. **Marsupialia. Marsupials.**

Family I. **Didelphyidæ. Opossums.**

Genus 3. **Marmosa.**

Marmosa Gray, Lond. Med. Repos., xv., 1821, p. 308. Type *Didelphis! murina* Linnæus.

Micoureus Less., Tabl. Règn. Anim., 1842, p. 186.

Asagis Glog., Hand- u. Hilfsb. Naturg., 1, 1841, p. 82.

Notagogus Glog., Hand- u. Hilfsb. Naturg., 1, 1841, p. 82.

Thylamys (sic) Gray, List Spec. Mamm. Brit. Mus., 1843, p. 101.

Grymæomys Burm., Syst. Uebers. Thiere Bras., 1, 1854, p. 135.

Microdidelphis! Burm., Erläut. Faun. Bras., 1856, p. 83, Taf. xiv, fig. 2, xv, figs. 1, 2.

Cuica Liais, Climats, Géol., Faun. et Geog., Botan. Brésil, 1872, p. 427.

3. Marmosa murina (Linnæus).

Didelphis! murina Linn., Syst. Nat., 1, 1758, p. 55.

Didelphis! dorsigera Linn., Syst. Nat., 1, 1758, p. 55.

Didelphys cayopollin Schreb., Säugth., iii, 1778, p. 544, pl. cxlviii.

Didelphis! guianensis Kerr, Linn. Anim. Kingd., 1792, p. 194.

Didelphis! impavida Tschudi, Faun. Peruana, 1844, p. 149, pl. ix.

Didelphys musculus Cab., Schomb. Brit. Guiana, iii, 1848, p. 778.

Marmosa murina Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., iv, Pt. 1, 1904, p. 5. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., vi, 1905, p. 2. Zoöl. Ser.

Murine Opossum. *Tlacuazin Ratton* in Guatemala.

1. Adult — P. Honduras. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult — Pres. Central America. Mrs. J. A. Tomhagen.

a. Marmosa murina mexicana Merriam.

Marmosa murina mexicana Merr., Proc. Biol. Soc. Wash., xi, 1897, p. 44. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M.

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Pub., IV, Pt. I, 1904, p. 6. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 2. Zoöl. Ser.

MEXICAN MURINE OPOSSUM.

1–2. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

4. Marmosa cinerea (Temminck).

Didelphys cinerea Temm., Mon. Mamm., I, 1827, p. 46.

Micoureus cinereus Less., Nouv. Tabl. Règn. Anim., 1842, p. 186.

Didelphys noctivaga Tschudi, Faun. Peruana, 1844, p. 148, pl. VIII.

Grymæomys scapulatus Burm., Erläut. Faun. Bras., 1856, p. 79, pl. XII.

Didelphys waterhousii Tomes, Proc. Zoöl. Soc., 1860, pp. 58, 217, 307, fig. & pl. LXXVI.

Marmosa cinerea Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 7, fig. 11. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 3. Zoöl. Ser.

ASHY OPOSSUM.

1. Adult — P. Venezuela. Deyrolle Fils.

5. Marmosa marica Thomas.

Marmosa marica Thos., Ann. Mag. Nat. Hist., 7th Ser., I, 1898, p. 455.

MARICA OPOSSUM.

1. Adult — P. Venezuela. Deyrolle Fils.

6. Marmosa pusilla (Desmarest).

Didelphys pusilla Desm., Nouv. Dict. Hist. Nat., XXIV, 1804, p. 19.

Didelphys nana Illig., Abh. Akad. Berl., 1815, p. 107.

Didelphys elegans Lund, Blik Bras. Dyrev., K. Dansk. Vidensk. Afhandl., IX, 1842, p. 135. (nec Waterhouse.)

Grymæomys agilis Burm., Erläut. Faun. Bras., 1856, p. 82, pl. XV, fig. 1; pl. IX, fig. 6.

PIGMY OPOSSUM.

1. Adult — P. Venezuela. Deyrolle Fils.

7. Marmosa chapmani Allen.

Didelphis! (*Micoureus*) *murina* Allen & Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 230. (nec Linnæus.)

Marmosa chapmani Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1900 p. 197.

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CHAPMAN'S OPOSSUM.

1. Adult ♀ Paratype. Exch. Caura, Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

2–3. Adult ♂ Exch. Princestown, Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

Genus 4. **Caluromys.**

Caluromys Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1900, p. 189. Type *Didelphis! philander* Linnæus.

a. Caluromys laniger pallidus (Thomas).
Philander laniger pallidus Thos., Ann. Mag. Nat. Hist., 7th Ser., IV, 1899, p. 286.

FIG. I. CALUROMYS DERBIANUS. EARL OF DERBY'S OPOSSUM.

Caluromys laniger pallidus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1900, p. 189. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. 1, 1904, p. 10. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 4. Zoöl. Ser.

PALE WOOLLY OPOSSUM.

1. Adult — P. Honduras. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 5. **Metachirus.**

Metachirus Burm., Syst. Uebers. Thier. Bras., I, 1854, p. 135. Type *Didelphys nudicaudata* E. Geoffroy.

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a. Metachirus fuscogriseus pallidus Allen.

Metachirus fuscogriseus pallidus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1901, p. 215. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 13. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 5. Zoöl. Ser.

ORIZABA OPOSSUM.

1–6. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

7–8. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

8. Metachirus opossum (Linnæus).

Didelphis! opossum Linn., Syst. Nat., I, 1758, p. 55.

Didelphis! quica Temm., Mon. Mamm., I, 1827, p. 36.

QUICA OPOSSUM.

1. Adult — P. Brazil. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 6. **Didelphys.**

Didelphis (sic) Linnæus, Syst. Nat., I, 1758, p. 54. Type *Didelphis! marsupialis* Linnæus.

Philander Brisson, Regn. Anim., 1762, pp. 13, 207.

Subgenus A. **Philander.**

9. Didelphys trinitatis Thomas.

Didelphys trinitatis Thos., Ann. Mag. Nat. Hist., 6th Ser., XIII, 1894, p. 438.

PHILANDER OPOSSUM.

1–2. Adult ♂ Exch. Caura, Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

Subgenus B. **Didelphys.**

10. Didelphys marsupialis Linnæus.

Didelphis! marsupialis Linn., Syst. Nat., I, 1758, p. 54. Thos., Am. Nat., XXXV, 1901, p. 144.

Didelphis! karkinophaga! Zimm., Geogr. Gesch., II, 1780, p. 226.

Didelphis! carcinophaga Bodd., Elench. Anim., I, 1785, p. 77.

Didelphis! cancrivora Gmel., Syst. Nat., I, 1788, p. 108.

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LINNÆUS'S OPOSSUM.

1. Adult ♂ Exch. Princestown, Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
2. Adult — P. Venezuela. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Didelphys marsupialis etensis Allen.

Didelphis! karkinophaga caucae Bangs, Amer. Nat., XXXV, 1901, p. 633. (nec Allen.)

Didelphis! marsupialis etensis Allen, Bull. Am. Mus. Nat Hist. N. Y., 1902, p. 262.

Didelphys marsupialis etensis Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 18. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 8. Zoöl. Ser.

ETEN OPOSSUM.

1–3. Adult ♂ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.
4–6. Adult ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.
7–8. Juv. ♂ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.
9–10. Juv. ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

11. Didelphys mesamericana Oken.

Didelphis! mesamericana Oken, Lehrb. der Zool., II, 1816, p. 1152.

Didelphis! californica Bennett, Proc. Zoöl. Soc., 1833, p. 40.

Didelphys californica Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 3.

Didelphys mesamericana Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 15, fig. V, pl. II. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 6. Zoöl. Ser.

MEXICAN OPOSSUM.

1–6. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
7–10. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
11. Adult ♂ Coll. Orizaba, State of Vera Cruz, Mexico. Heller & Barber.
12–13. Adult ♀ Coll. Orizaba, State of Vera Cruz, Mexico. Heller & Barber.
14. Adult ♂ Coll. Esperanza, State of Puebla, Mexico. Heller & Barber.
15–16. Adult — Coll. ———? State of Jalisco, Mexico. F. E. Lutz.

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17–22. Adult ♂ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.
23. Adult ♀ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.
24–25. Adult ♀ Coll. Noble, Oklahoma Territory. T. Surber
26. Adult ♂ Coll. Geronimo, State of Oaxaca, Mexico. Heller & Barber.
27. Adult ♀ P. Mazatlan, State of Jalisco, Mexico. A. Forrer.
28. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
29. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

a. Didelphys mesamericana tabascensis (Allen).

Didelphis! marsupialis tabascensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1901, p. 173.

Didelphys mesamericana tabascensis Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 16. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 6. Zoöl. Ser.

TABASCO OPOSSUM.

1–3. Adult ♂ Black phase. Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
4–5. Adult ♀ Gray phase. Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
6. Adult ♂ Gray phase. Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.
7. Adult ♂ Black phase. Coll. Xico, State of Vera Cruz, Mexico. N G. Buxton.

12. Didelphys virginiana Kerr.

Didelphis! virginiana Kerr, Anim. Kingd., 1792, p. 193. Shaw, Gen. Zoöl. I, Pt. 2, 1800, p. 473.

Didelphis! virginiana pigra Bangs, Proc. Bost. Soc. Nat. Hist., 1898, p. 172.

Didelphys virginiana Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 1, fig. 1. Zoöl. Ser. *Id.* Pub. Field Columb. Mus., III, 1901, p. 32. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 7. Zoöl. Ser.

Didelphys virginiana pigra Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 1. Zoöl. Ser.

VIRGINIAN OPOSSUM.

1–8. Adult & juv. — P. Illinois. Ward's Nat. Scien. Establ., Rochester, N. Y.

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9. Adult — Albino. P. Little Beaver Creek, Wake County, N. Carolina. R. L. Bagley.
10. Adult ♂ Coll. White Sulphur Springs, W. Virginia. T. Surber.
11. Adult ♂ Coll. Enterprise, Florida. T. Surber.
12–13. Adult ♀ Coll. Enterprise, Florida. T. Surber.
14. Adult ♂ Coll. Gainesville, Florida. T. Surber.
15. Adult ♀ Coll. New Berlin, Florida. T. Surber.
16. Adult ♂ Coll. Espanita, Anastasia Island, Florida. T. Surber.

Family II. **Dasyuridæ. Thylacine and Dasyures.**

Genus 7. **Sarcophilus.**

Sarcophilus F. Cuv., Hist. Nat. Mamm., IV, livr. LXX, 1837, 6 pp. text & pl. Type *Didelphys ursina* Harris.

Diabolus Gray, Grey's Journ. Two Exped. North-west and West. Austr., II, 1841, Append., p. 400.

13. Sarcophilus ursinus (Harris).

Didelphys ursina Harris, Trans. Linn. Soc., IX, 1808, p. 176, pl. XIX, fig. 2. (nec Shaw.)

Dasyurus ursinus Geoff., Ann. Mus. Hist. Nat. Paris, XV, 1805, p. 305.

Sarcophilus ursinus F. Cuv., Hist. Nat. Mamm., IV, 1837, pl. LXX.

Diabolus ursinus Gray, Grey's Journ. Two Exped. North-west and West. Austr., II, 1841, Append., p. 400.

TASMANIAN DEVIL.

1. Adult — P. Van Dieman's Land. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 8. **Dasyurus.**

Dasyurus E. Geoff., Mag. Encyclop., III, 1796, p. 469. *Id.* Bull. Soc. Philom., I, 1796, p. 106. Type *Didelphis ! viverrinus* Shaw.

14. Dasyurus maculatus (Kerr).

Viverra maculata Kerr, Anim. Kingd., 1792, p. 170.

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Mustela novæ-hollandiæ Meyer, Syst. Uebers. Zool. Entd. Neu-Holl., 1793, p. 27.

Dasyurus macrourus Geoff., Ann. Mus. Hist. Nat. Paris, III, 1804, p. 358.

Dasyurus maculatus Fisch., Zoogn., II, 1813, p. 584.

Dasyurus ursinus Gieb., Bronn's Kl. u. Ordn., VI, Abth. V, 1874, pl. XVIII, figs. 4, 5. (nec Harris.)

SPOTTED-TAILED DASYURE.

1. Adult — P. Tasmania. Ward's Nat. Scien. Establ., Rochester, N. Y.

Family III. **Peramelidæ. Bandicoots.**

Genus 9. **Thylacomys.**

Thalacomys (misprint) Owen, Blyth's Cuv. Anim. Kingd., 1840, p. 104. Type *Perameles lagotis* Reid.

Macrotis Reid, Proc. Zoöl. Soc., 1836, p. 131. (nec Dejean, 1833, Coleopt.)

Paragalia (sic) Gray, Grey's Journ. Two Exped. North-west and West. Austr., II, 1841, Append., p. 401.

15. Thylacomys lagotis (Reid),

Perameles lagotis Reid, Proc, Zoöl. Soc., 1836, p. 129.

RABBIT BANDICOOT.

1. Adult — P. West Australia. Ward's Nat. Scien. Establ., Rochester, N. Y.

Family IV. **Phascolomyidæ. Wombats.**

Genus 10. **Phascolomys.**

Phascolomis! E. Geoff., Ann. Mus. Hist. Nat. Paris, II, 1803, p. 364. Type *Didelphis! ursina* Shaw.

Vombatus E. Geoff., Bull. Soc. Philom. Paris, III, 1803, p. 185.

Amblotis Illig., Prodr. Syst. Mamm. et Av., 1811, p. 77.

Lasiorhinus Gray, Ann. Mag. Nat. Hist., 3rd Ser., XI, 1863, p. 458.

16. Phascolomys ursinus (Shaw).

Didelphis! ursina Shaw, Gen. Zoöl., I, Pt. 2, 1800, p. 504.

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Wombatus fossor Desm., Nouv. Dict. d'Hist. Nat., XXIV, 1803, p. 20.
Amblotis fossor Illig., Prodr. Syst. Mamm. et Av., 1811, p. 77.
Phascolomys fusca Illig., Prodr. Syst. Mamm. et Av., 1811, p. 78.
Phascolomys vombatus Leach, Zoöl. Misc., II, 1815, p. 102, pl. XCVI.
Phascolomys ursinus G. Cuv., Règn. Anim., I, 1817, p. 185.
Phascolomys bassii Less., Man. Mamm., 1827, p. 229.

TASMANIAN WOMBAT.

1. Adult — P. New South Wales. Ward's Nat. Scien. Establ., Rochester, N. Y.

Family V. **Phalangeridæ. Phalangers.**

Subfamily I. **Phalangerinæ.**

Genus 11. **Phalanger.**

Phalanger Storr, Prodr. Meth. Mamm., 1780, p. 33. Type *Didelphis! orientalis* Pallas.
Phalangista G. Cuv. & E. Geoff., Mag. Encyclop., II, 1795, pp. 183, 187.
Cœscoes Lacép., Tabl. Mamm., 1799, p. 5.
Balantia Illig., Prodr. Syst. Mamm. et Av., 1811, p. 77.
Sipalus Fisch., Zoogn., II, 1813, p. 581.
Cuscus Less., Voy. 'Coquille,' Zool., I, 1826, p. 150.
Ceonyx Temm., Mon. Mamm., I, 1827, p. 10.
Ailurops Wagl., Nat. Syst. Amph., Säugth., 1830, p. 26.
Eucuscus Gray, Proc. Zoöl. Soc., 1861, p. 316.
Spilocuscus Gray, Proc. Zoöl. Soc., 1861, p. 316.
Strigocuscus Gray, Proc. Zoöl. Soc., 1861, p. 319.

17. **Phalanger orientalis** (Pallas).
Didelphis! orientalis Pall., Misc. Zool., 1766, p. 59.
Didelphis! indica Müll., Linn. Naturs., Suppl., VII, 1776, p. 35.
Phalanger orientalis Storr, Prodr. Meth. Mamm., 1780, p. 33.
Didelphis! molucca Gmel., Syst. Nat., I, 1788, p. 106.
Cœscoes amboinensis Lacép., Mém. Instit., III, 1801, p. 491.
Phalangista alba E. Geoff., Cat. Mus. Paris, 1803, p. 148.
Phalangista rufa E. Geoff., Cat. Mus. Paris, 1803, p. 149.
Phalangista minor and *fusca* Schinz, Cuv. Thierr., I, 1821, p. 258.

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Phalangista cavifrons Temm., Mon. Mamm., I, 1827, p. 17, pl. I, figs. 7–9; pl. II, figs. 7–10.
Phalangista gymnotis Peters & Doria, Ann. Mus. Genov., VII, 1875, p. 543.
Cuscus vestitus Milne-Edw., Comptes Rendus Acd. Sci. Paris, 1877, p. 1080.

GRAY CUSCUS.

1. Adult — P. New South Wales. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 12. **Trichosurus.**

Trichosurus Less., Dict. Class. Hist. Nat., XIII, 1828, p. 333. Type *Didelphis! vulpecula* Kerr.
Psilogrammurus Glog., Hand-u. Hilfsb. Naturg., 1841, p. 85.
Trichurus Wagn., Schreb. Säugth., Suppl., III, 1843, p. 74.

18. Trichosurus vulpecula (Kerr).
Didelphis! vulpecula Kerr, Anim. Kingd., 1792, p. 198.
Didelphis! vulpina Meyer, Syst. Uebers. Zool. Entd. Neu-Holl., 1793, p. 23.
Didelphis! tapouaru Meyer, Syst. Uebers. Zool. Entd. Neu-Holl., 1793, p. 24.
Didelphis! lemurina Shaw, Gen. Zoöl., I, Pt. II, 1800, p. 487, pl. CX.
Ursus novæ hollandiæ Bechst., in Penn. Allgem. Uebers. vierf. Thiere, II, 1800, pp. 337, 683.
Phalangista lemurina G. Cuv., Règn. Anim., I, 1817, p. 179.
Phalangista vulpina Desm., Nouv. Dict. Hist. Nat., XXV, 1817, p. 475.
Phalangista cooki F. Cuv., Hist. Nat. Mamm., III, livr. XLV, 1824.
Phalangista bougainvillei Fisch., Syn. Mamm., 1829, p. 583.
Balantia vulpina Wagl., Nat. Syst. Amph., Säugth., 1830, p. 25.
Phalangista xanthopus Ogilby, Proc. Zoöl. Soc., 1831, p. 135.
Phalangista cuvieri Gray, Grey's Journ. Two Exped. Northwestern and West. Austr., II, 1841, Append., p. 401.
Trichosurus xanthopus Less., Nouv. Tabl. Règn. Anim., Mamm., 1842, p, 189.
Phalangista melanura Wagn., Schreb. Säugth., Suppl., III, 1843, p. 81.
Phalangista hypoleucus Wagn., Schreb. Säugth., Suppl., V, 1855, p. 273, pl. XXII.

COMMON PHALANGER.

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1. Adult — P. Victoria, Australia. Ward's Nat. Scien. Establ., Rochester, N .Y.

a. *Trichosurus vulpecula fuliginosus* (Ogilby).
Phalangista fuliginosa Ogilby, Proc. Zoöl. Soc., 1831, p. 135.
Phalangista felina Wagn., Schreb. Säugth., Suppl., III, 1843, p. 76.
TASMANIAN PHALANGER.
1. Adult — P. New South Wales. Ward's Nat. Scien. Establ., Rochester, N. Y.

19. Trichosurus caninus (Ogilby).
Phalangista canina Ogilby, Proc. Zoöl. Soc., 1835, p. 191.
SHORT-EARED PHALANGER.
1. Adult — P. Victoria? Australia? Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 13. **Petauroides.**

Petauroides Thos., Cat. Marsup. & Monotr. Brit. Mus., 1888, p. 163. Type *Didelphis! volans* Kerr.
Voluccella Bechst., in Penn. Allgem. Uebers. vierf. Thiere, II, 1800, p. 351. (nec Geoff., 1764; nec Fabr., 1794, Diptera.)
Petaurista Desm., Mamm., I, 1820, p. 268. (nec Link, 1795; nec Fisch., 1814.)

20. Petauroides volans (Kerr).
Didelphis! volans Kerr, Anim. Kingd., 1792, p. 199.
Didelphis! macroura Shaw, Zoöl. New Holland, I, 1794, p. 33, pl. XII.
Phalangista petaurista E. Geoff., Cat. Mus. Paris, 1803, p. 150.
Petaurus macrurus Desm., Nouv. Dict. Hist. Nat., XXV, 1817, p. 402.
Petaurus peronii Desm., Nouv. Dict. Hist. Nat., XXV, 1817, p. 404.
Petaurus taguanoides Desm., Nouv. Dict. Hist. Nat., XXV, 1817, p. 400.
Petaurus didelphoides F. Cuv., Dents Mamm., 1825, pp. 129, 253.
Petaurus leucogaster Mitch., Exped. East Austr., I, 1838, p. XVII.
Petaurus volans Thos., Ann. Mag. Nat. Hist., 5th Ser., IV, 1879, p. 397.
TAGUAN FLYING PHALANGER.
1. Adult — P. Australia. Ward's Nat. Scien. Establ., Rochester, N. Y.

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Genus 14. **Dactylopsila.**

Dactylopsila Gray, Proc. Zoöl. Soc., 1858, p. 109. Type *Dactylopsila trivirgata* Gray.

21. Dactylopsila trivirgata Gray.

Dactylopsila trivirgata Gray, Proc. Zoöl. Soc., 1858, p. 111, pl. LXIII.
Phalangista trivirgata Schleg., Dierent., 1872, p. 166.
Dactylopsila albertisi Peters & Doria, Ann. Mus. Genov., VII, 1875, p. 542.
Phalangista (*Dactylopsila*) *angustivittis* Peters & Doria, Ann. Mus. Genov., XVI, 1881, p. 674.

STRIPED PHALANGER.

1. Adult — P. Mount Gayata, Richardson Range, Australia. E. Gerrard & Sons.

Genus 15. **Petaurus.**

Petaurus Shaw, Nat. Misc., II, 1791, pl. LX, text. Type *Petaurus australis* Shaw.

Ptilotus Fisch., Zoogn., III, 1814, p. 512.
Belideus Waterh., Proc. Zoöl. Soc., 1839, p. 151.
Xenochirus Glog., Hand- u. Hilsfb. Naturg., I, 1841, p. 85.

22. * Petaurus sciureus (Shaw).

Didelphis? sciurea Shaw, Zoöl. New Holl., I, 1794, p. 29, pl. XI.
Voluccella sciurea Bechst., in Penn. Allegm. Uebers. vierf. Thiere, II, 1800, pp. 352, 686.
Petaurus sciureus Desm., Nouv. Dict. Hist. Nat., XXV, 1817, p. 403.
Petaurista sciurea Desm., Mamm., I, 1820, p. 270.
Phalangista sciurea Schinz, Cuv. Thierr., I, 1821, p. 260.
Belideus sciureus Less., Nouv. Tab. Règn. Anim., Mamm., 1842, p. 189.
Belideus gracilis De Vis, Proc. Linn. Soc. N. S. Wales, VII, 1882, p. 619.

SQUIRREL FLYING PHALANGER.

1. Adult — P. New South Wales. Ward's Nat. Scien. Establ., Rochester, N. Y.

* As it is impossible to determine whether Phillips's description of the "Norfolk Island Flying Squirrel," Voy. Bot. Bay, 1789, p. 151, pl. XVII, refers to the *P. sciureus* or *P. breviceps*, the only difference between them being the size of the molars, it is best to drop Kerr's name, *Sciurus* (*Petaurus*) *norfolcensis* as undeterminable in favor of the one bestowed by Shaw, l. c.

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Genus 16. **Acrobates.**

Acrobates Desm., Nouv. Dict. Hist. Nat., XXV, 1817, p. 405. Type *Didelphis! pygmæa* Shaw.

Cercoptenus Glog., Hand- u. Hilfsb. Naturg., 1841, p. 85.

23. Acrobates pygmæus (Shaw).

Didelphis! pygmæa Shaw, Zoöl. New Holl., I, 1794, p. 5, pl. II.

Voluccella pygmæa Bechst., in Penn. Allgem. Uebers. vierf. Thiere, II, 1800, pp. 352, 686.

Phalangista pygmæa E. Geoff., Cat. Mus. Paris, 1803, p. 151.

Acrobates pygmæus Desm., Nouv. Dict. Hist. Nat., XXV, 1817, p. 405.

Petaurista pygmæa Gray, Griff. Anim. Kingd., V, 1827, p. 200.

Petaurus pygmæus Less., Dict. Class. Hist. Nat., XIII, 1828, p. 289.

Dromicia frontalis De Vis, Proc. Linn. Soc. N. S. Wales, I, 1887, p. 1134.

PIGMY FLYING PHALANGER.

1. Adult — P. New South Wales. Ward's Nat. Scien. Establ., Rochester, N. Y.

Subfamily II. **Phascolarctinæ.**

Genus 17. **Phascolarctus.**

Phascolarctus Blainv., Bull. Soc. Philom. Paris, 1816, p. 116. Type (*Lipurus cinereus* Goldfuss auct., 1819!)

Lipurus Goldf., Schreb. Säugth., 1817, pls. CLV, Aa, Ab. (nec Illig., 1811.)

Morodactylus Goldf., Handb. Zool., II, 1820, p. 445.

24. Phascolarctus cinereus (Goldfuss).

Lipurus cinereus Goldf., Isis, 1819, p. 274.

Morodactylus cinereus Goldf., Zool. II, 1820, p. 445.

Phascolarctus fuscus Desm., Mamm., I, 1820, p. 276.

Phascolarctus koala Gray, Griff. Anim. Kingd., 1827, p. 205.

Phascolarctus flindersi Less., Man. Mamm., 1827, p. 221.

Phascolarctus cinereus Fisch., Syn. Mamm., 1829, p. 285.

KOALA.

1. Adult — P. Victoria, Australia. Ward's Nat. Scien. Establ., Rochester, N. Y.

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Family VI. **Macropodidæ. Kangaroos.**

Subfamily I. **Potoroinæ.**

Genus 18. **Potorous.**

Potorous Desm., Nouv. Dict. Hist. Nat., XXIV, 1804, p. 20. Type *Didelphis! tridactyla* Kerr.

Hypsiprymnus Illig., Prodr. Syst. Mamm. et Av., 1811, p. 79.

25. Potorous tridactylus (Kerr).

Didelphis! tridactyla Kerr, Anim. Kingd., 1792, p. 198.

Didelphis! potoru Meyer, Syst. Uebers. Zool. Entd. Neu-Holl., 1793, p. 13.

Didelphis! murina Cuv., Tabl. Élém., 1798, p. 126. (nec Linn.)

Yerboa potoru Bechst., in Penn. Allgem. Uebers. vierf. Thiere, II, 1800, pp. 356, 686.

Macropus minor Shaw, Gen. Zoöl., I, Pt. 2, 1800, p. 513, pl. CXVI.

Kangurus murinus Tiedem., Zool., 1808, p. 435.

Hypsiprymnus potoru Illig., Prods. Syst. Mamm. et Av., 1811, p. 79.

Hypsiprymnus peronii Quoy & Gaim., Voy. 'Uranie,' Zool., 1824, p. 64.

Hypsiprymnus setosus Ogilby, Proc. Zoöl. Soc., 1831, p. 149.

Hypsiprymnus myosurus Ogilby, Proc. Zoöl. Soc., 1838, p. 62.

Perameles tuckeri Gray, Ann. Nat. Hist., V, 1840, p. 150.

Hypsiprymnus apicalis Gould, Mamm. Austr., 1851, pl. LXVIII.

Potorous rufus Higg. & Pett., Proc. Roy. Soc. Tasman., 1883, pp. 181, 196.

COMMON RAT KANGAROO.

1. Adult — P. South Australia. E. Gerrard & Sons.
2. Adult — P. New South Wales. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 19. **Bettongia.**

Bettongia Gray, Charlesw. Mag. Nat. Hist., I, 1837, p. 584. Type *Hypsiprymnus cuniculus* Ogilby.

26. Bettongia lesueuri (Quoy & Gaimard).

Hypsiprymnus lesueuri Quoy & Gaim., Voy. 'Uranie,' Zool., 1824, p. 64.

Hypsiprymnus grayi Gould, Proc. Zoöl. Soc., 1840, p. 178.

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Bettongia grayi Gray, Grey's Journ. Two Exped. North-west and West. Austr., II, 1841, Append., p. 403.

Perameles harveyi Waterh., Proc. Zoöl. Soc., 1842, p. 47.

LESUEUR'S RAT KANGAROO.

1. Adult — P. Victoria, South Australia. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 20. Æpyprymnus.

Æpyprymnus Garrod, Proc. Zoöl. Soc., 1875, p. 59. Type *Bettongia rufescens* Gray.

27. Æpyprymnus rufescens (Gray).

Bettongia rufescens Gray, Charlesw. Mag. Nat. Hist., I, 1837, p. 584.

Hypsiprymnus melanotis Ogilby, Proc. Zoöl. Soc., 1838, p. 62.

Hypsiprymnus rufescens Waterh., Jard. Nat. Libr., Mamm., XI, 1841, p. 188.

Macropus rufescens Schleg., Dierk., 1857, p. 687.

Æpyprymnus rufescens Garrod, Proc. Zoöl. Soc., 1875, p. 59.

RUFOUS RAT KANGAROO.

1. Adult — P. New South Wales. Ward's Nat. Scien. Establ., Rochester, N. Y.

Subfamily II. Macropodinæ.

Genus 21. Dorcopsis.

Dorcopsis Schleg. & Müll., Verh. Nat. Ges. Ned., 1839–44, p. 130. Type *Macropus mulleri* Schlegel.

28. Dorcopsis luctuosa (D'Albertis).

Halmaturus luctuosus D'Albertis, Proc. Zoöl. Soc., 1874, p. 110.

Dorcopsis luctuosa Garrod, Proc. Zoöl. Soc., 1875, p. 49, pls. VII, VIII, IX.

Dorcopsis chalmersi Mikl.-Macl., Proc. Linn. Soc. N. S. Wales, IX, 1884, p. 569, pl. XIX.

Dorcopsis beccarii Mikl.-Macl., Proc. Linn. Soc. N. S. Wales, X, 1885, p. 146, pl. XX, figs. 1-4.

GRAY DORCOPSIS.

1. Adult — P. S. E. New Guinea. E. Gerrard & Sons.

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Genus 22. **Onychogale.**

Onychogalea (sic) Gray, Grey's Journ. Two Exped. North-west and West. Austr., II, 1841, Append., p. 402. Type *Macropus unguifer* Gould.

29. Onychogale frenata (Gould).

Macropus frenatus Gould, Proc. Zoöl. Soc., 1840, p. 92.

Macropus (*Onychogalea*) *frænatus* Gray, Grey's Journ. Two Exped. North-west & West. Austr., II, 1841, Append., p. 402.

Onychogalea! frænata Gray, List Spec. Mamm. Brit. Mus., 1843, p. 88.

Halmaturus frænatus Schinz, Syn. Mamm., I, 1844, p. 548.

BRIDLED WALLABY.

1. Adult — P. South Australia. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 23. **Macropus.**

Macropus Shaw, Nat. Misc., I, 1790, text, pl. XXXIII. Type *Macropus giganteus* Shaw = *Yerboa gigantea* Zimmermann.

Kangurus G. Cuv. & E. Geoff., Mag. Encyclop., II, 1795, pp. 180, 188.

Halmaturus Illig., Prodr. Syst. Mamm. et Av., 1811, p. 80.

Thylogale Gray, Charlesw. Mag. Nat. Hist., I, 1837, p. 583.

Osphranter! Gould, Proc. Zoöl. Soc., 1842, p. 80.

Setonix Less., Nouv. Tabl. Régn. Anim., Mamm., 1842, p. 194.

Gerboides I. Geoff., Gerv. Hist. Nat. Mamm., II, 1855, p. 271.

Phascolagus Owen, Proc. Roy. Soc. Lond., XXI, 1873, p. 128.

Boriogale Owen, Phil. Trans. Roy. Soc. Lond., CLXIV, 1874, p. 247, pl. XX, figs. 12, 12a, 19; pl. XXI, fig. 5.

30. Macropus thetidis (Lesson).

Halmaturus thetis! Less., Man. Mamm., 1827, p. 229.

Halmaturus thetidis F. Cuv., Hist. Nat. Mamm., livr. LVI, 1829, pl.

Macropus thetis! Fisch., Syn. Mamm., 1829, p. 284.

Halmaturus eugenii Gray, Charlesw. Mag. Nat. Hist., I, 1837, p. 583. (nec Desm.)

Halmaturus nuchalis Wagn., Schreb. Säugth., Suppl., III, 1843, p. 128.

Macropus thetidis Waterh., Nat. Hist. Mamm., I, 1846, p. 144, pl. III, fig. 2. Gieb., Odontogr., 1855, p. 43, pl. XIX, figs. 11A & B.

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PADEMELON WALLABY.

1. Adult — P. Victoria, S. Australia. Ward's Nat. Scien. Establ., Rochester, N. Y.

31. Macropus ualabatus (Lesson & Garnot).

Kangurus bruni Desm., Nouv. Dict. Hist. Nat., XVII, 1817, p. 42. (nec Schreb.)

Kangurus ualabatus Less. & Garn., Voy. 'Coquille', Zool., I, 1826, p. 161, pl. VII.

Macropus ualabatus Less., Man. Mamm., 1827, p. 227.

Halmaturus lessoni Gray, Charlesw. Mag. Nat. Hist., I, 1837, p. 583.

Halmaturus ualabatus Gray, Grey's Journ. Two Exped. Northwest & West. Austr., II, 1841, Append., p. 402.

Halmaturus nemoralis Wagn., Schreb. Säugth., Suppl., III, 1843, p. 114.

BLACK-TAILED WALLABY.

1. Adult — P. Victoria, South Australia. Ward's Nat. Scien. Establ., Rochester, N. Y.

32. Macropus rufus (Desmarest).

Kangurus rufus Desm., Mamm., Suppl., II, 1822, p. 541.

Kangurus laniger Gaim., Bull. Soc. Philom., 1823, p. 138.

Kangurus griseo-lanosus Quoy & Gaim., Ann. Scien. Nat., V, 1825, p. 482.

Macropus lanigerus Gray, Griff. Anim. Kingd., III, 1827, p. 49, pl.

Macropus laniger Less., Man. Mamm., 1827, p. 226.

Macropus rufus Benn., Cat. Nat Hist. Austr. Mus., 1837, p. 6.

Halmaturus laniger Wagn., Schreb. Säugth., Suppl., III, 1843, p. 110.

Osphranter lanigerus Gould, Strzelecki's N. S. Wales, 1845, p. 316.

Osphranter rufus Gould, Mamm. Austr., II, 1853, pls. VI, VII.

Macropus pictus Gould, Proc. Zoöl. Soc., 1860, p. 373.

Macropus ruber Crisp, Proc. Zoöl. Soc., 1862, p. 135.

RED KANGAROO.

1. Adult — P. Victoria, South Australia. Ward's Nat. Scien. Establ., Rochester, N. Y.

33. Macropus giganteus (Zimmermann).

Yerboa gigantea Zimm., Spec. Zool. Geogr., 1777, p. 526.

Jaculus giganteus Erxl., Syst. Regn. Anim., 1777, p. 409.

Didelphys gigantea Schreb., Säugth., III, 1778, p. 552, pl. CLIV.

Didelphis ! kenguru Zimm., Geogr. Gesch., II, 1780, p. 231.

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Macropus giganteus Shaw, Nat. Misc., I, 1790, pl. XXXIII.
Macropus major Shaw, Gen. Zoöl., I, Pt. II, 1800, p. 505, pl. CXV.
Kangurus giganteus E. Geoff., Cat. Mus. Paris, 1803, p. 154.
Halmaturus giganteus Illig., Prodr. Syst. Mamm. et Av., 1811, p. 80.
Kangurus labiatus Desm., Nouv. Dict. Hist. Nat., XVII, 1817, p. 33.
Halmaturus griseofuscus Goldfuss, Isis, 1819, p. 266.
Halmaturus labiatus Goldfuss, Isis, 1819, p. 266
Halmaturus griseorufus Goldfuss, Isis, 1819, p. 267.
Macropus ocydromus Gould, Ann. Mag. Nat. Hist., 1st Ser., X, 1842, p. 1.

GREAT GRAY KANGAROO.

1. Adult ♂ P. Victoria, South Australia. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♀ P. Victoria, South Australia. Ward's Nat. Scien. Establ., Rochester, N. Y.
3. Juv. — P. Victoria, South Australia. Ward's Nat. Scien. Establ., Rochester, N. Y.

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SUBCLASS III. EUTHERIA.

Order III. **Edentata. Edentates.**

Family I. **Bradypodidæ. Sloths.**

Genus 24. **Choloepus.**

Choloepus Illig., Prodr. Syst. Mamm. et Av., 1811, p. 108. Type *Bradypus didactylus* Linnæus.

34. Choloepus hoffmanni Peters.

Choloepus hoffmanni Peters, Monatsb. K. Preuss. Ak. Wiss. Berl., 1858, p. 128. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 20, figs. 4, VI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 9. Zoöl. Ser.

FIG. II. CHOLOEPUS HOFFMANNI. HOFFMANN'S SLOTH.

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HOFFMANN'S SLOTH. *Perico Lijero* in Costa Rica.

1–4. Adult — P. Panama, Central America. Ward's Nat. Scien. Establ., Rochester, N. Y.

5–6. Adult ♂ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

7–10. Adult ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

11. Juv. ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

Genus 25. **Bradypus.**

Bradypus Linn., Syst. Nat., I, 1758, p. 34. Type *Bradypus tridactylus* Linnæus.

Acheus F. Cuv., Dents Mamm., 1825, pp. 194, 256, pl. LXXVIII.

* *Arctopithecus* Gray, List Spec. Mamm. Brit. Mus., 1843, p. XXVIII. (nomen nudum.) *Id.* Proc. Zoöl. Soc., 1849, pp. 65, 70-73, pl. XI.

Scaeopus Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1865, p. 678.

35. Bradypus tridactylus Linnæus.

Bradypus tridactylus Linn., Syst. Nat., I, 1758, p. 34.

Bradypus crinitus Gray, Proc. Zoöl. Soc., 1849, p. 67.

THREE-TOED SLOTH.

1–2. Adult — P. Rio de Janeiro, Brazil. Ward's Nat. Scien. Establ., Rochester, N. Y.

Family II. **Myrmecophagidæ. Anteaters.**

Genus 26. **Cyclopes.**

Cyclopes Gray, Lond. Med. Repos., XV, 1821, p. 305. Type *Myrmecophaga didactyla* Linnæus.

Didactyles F. Cuv., Dict. Scien. Nat., LIX, 1829, p. 501.

Myrmydon Wagl., Nat. Syst. Amph., 1830, p. 36.

Dionyx I. Geoff., Rés. Leçons Mamm. Mus. Paris, 1835, p. 54.

Myrmecolichnus Reich., K. Säch. Naturh. Mus. Dresd., Ein Leitfaden, 1836, p. 51.

Eurypterna Glog., Hand- u. Hilfsb. Naturg., I, 1841, pp. XXXI, 112.

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*By some oversight quite inexplicable, there was cited in the Check-List. p. 9, after this name: Verey, Nouv. Dict. Hist. Nat., XXI, 1819, p. 279, which was applied to a species of Monkey and has nothing in common with Gray's name.

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Cyclothurus (sic) Less., Nouv. Tabl. Règn. Anim., Mamm., 1842, p. 152.
Didactyla Liais, Climats, Géol., Faun. et Geog., Botan. Brézil, 1872, p. 356.

36. Cyclopes dorsalis (Gray).
Cyclothurus dorsalis Gray, Proc. Zoöl. Soc., 1865, p. 385, pl. 19.
Cyclopes dorsalis Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 25, figs. 6, VIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 10. Zoöl. Ser.
LITTLE OR TWO-TOED ANTEATER.
1. Adult — P. Brazil. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 27. **Tamandua.**

Tamandua Frisch, Das Nat.-Syst. vierf. Thiere, in Tabellen, 5, Tab. Gen., 1775. Type *Myrmecophaga tetradactyla* Linnæus.
Tamanduas F. Cuv., Dict. Scien. Nat., LIX, 1829, p. 501.
Uroleptes Wagl., Nat. Syst. Amphib., 1830, p. 36.

37. Tamandua tetradactyla (Linnæus).
Myrmecophaga tetradactyla Linn., Syst. Nat., I, 1758, p. 35.
Myrmecophaga myosura Pall., Miscell. Zoöl., 1766, p. 64.
Ursine Anteater Griff., Anim. Kingd., III, 1827, p. 304, pl.
Myrmecophaga crispus Rüpp., Mus. Senck., III, 1845, p. 179.

FIG. III. TAMANDUA TETRADACTYLA.
THREE-TOED ANTEATER.

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Tamandua bivittata Gray, Proc. Zoöl. Soc., 1865, p. 384.

Myrmecophaga quadridactyla True, Proc. U. S. Nat. Mus., 1885, p. 588.

Tamandua tetradactyla Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 27, figs. 7, IX, X. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 10. Zoöl. Ser.

THREE-TOED ANTEATER.

1. Adult — P. South America. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Juv. — P. Brazil, South America. Ward's Nat. Scien. Establ., Rochester, N. Y.
3. Adult — P. Bonda, Colombia, South America. H. H. Smith.
4. Juv. — P. Bonda, Colombia, South America. H. H. Smith.
5. Adult ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.
6. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

38. Tamandua longicauda (Wagner).

Myrmecophaga longicauda Wagn., Schreb. Säugth., Suppl., IV, 1844, p. 210.

Tamandua longicaudata Gray, Cat. Carniv. Pachyderm. & Edent. Mamm. Brit. Mus., 1869, p. 392.

LONG-TAILED ANTEATER.

1. Adult — P. Trinidad ? Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 28. **Myrmecophaga.**

Myrmecophaga Linn., Syst. Nat., I, 1758, p. 35. Type *Myrmecophaga tridactyla* Linnæus.

39. Myrmecophaga tridactyla Linnæus.

Myrmecophaga tridactyla Linn., Syst. Nat., I, 1758, p. 35. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 29, figs. 8, XI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 12. Zoöl. Ser.

GREAT ANTEATER. *Oso Real* in Costa Rica.

1. Adult — P. Brazil. Ward's Nat. Scien. Establ., Rochester, N. Y.

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Family III. **Dasypodidæ. Armadillos.**

Subfamily I. **Chlamydophorinæ.**

Genus 29. **Chlamydophorus.**

Chlamyphorus (sic) Harlan, Ann. N. Y. Lyc. Nat. Hist., I, Pt. 2, 1825, p. 235, pls. XIX-XXI. Type *Chlamyphorus! truncatus* Harlan.

Burmeisteria Gray, Pr .. Zoöl. Soc., 1865, p. 381.

40. Chlamydophorus truncatus Harlan.

Chlamyphorus! truncatus Harlan, Ann. N. Y. Lyc. Nat. Hist., I, 1825, pl. 4.

THE PICHICHIAGO.

1. Adult — P. Mendoza, Argentine Republic. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 30. **Zaëdyus.**

Zaëdyus Ameghino, Contr. al Conoc. Mamif. Fos. Rep. Argent., 1889, p. 867. Type *Dasypus minutus* Desmaret.

Dasypus Linn., Syst. Nat., I, 1758, p. 50. (Part.)

Tatusie F. Cuv., Hist. Nat. Mamm., 1822, text pl. 293.

Tatusia F. Cuv., in Less. Man. Mamm., 1827, p. 309. (Part.)

Euphractus Wagl., Nat. Syst. Amphib., 1830, p. 36. (Part.)

Cryptophractus Fitzin., Tagebl. 32, Versamml. Deutsch. Naturf. & Aertze, Wien, 1856, p. 123. (Part.)

Dasyphractus Fitzin., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien, LXIV, Abth. I, 1871, p. 264. (Part.)

Chætophractus Fitzin., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien, LXIV, Abth. I, 1871, p. 268. (Part.)

Subgenus A. **Zaëdyus.**

41. Zaëdyus ciliatus (Fischer).

Dasypus ciliatus Fisch., Zoogn., III, 1814, p. 127.

Dasypus patagonicus Desm., Nouv. Dict. Hist. Nat., XXXII, 1819, p. 491.

Dasypus minutus Desm., Man. Mamm., 1822, p. 371.

Tatusia minuta Less., Man. Mamm., 1827, pp. 312, 347.

Dasypus (Euphractos) minutus Burm., Reise durch die La Plata-Staaten, II, 1861, p. 427.

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Euphractus minutus Gray, Cat. Carniv. Pachyderm. & Edent. Mamm. Brit. Mus., 1869, p. 382.

THE PICHY.

1. Adult — P. Buenos Aires, Argentine Republic. Ward's Nat. Scien. Establ., Rochester, N. Y.

Subgenus B. **Chætophractus.**

42. Zaëdyus villosus (Desmarest).

Dasypus villosus Desm., Nouv. Dict. Hist. Nat., 1817, p. 489.

Euphractus villosus Gray, Proc. Zoöl. Soc., 1865, p. 376. *Id.* Cat. Carniv. Pachyderm. & Edent. Mamm. Brit. Mus., 1869, p. 382.

PELUDO.

1. Adult — P. Argentine Republic. Ward's Nat. Scien. Establ., Rochester, N. Y.

Subfamily II. **Tatuinæ.**

Genus 31. **Tatu.**

Tatu Frisch, Das Nat.-Syst. vierf. Thiere, in Tabellen, 5, Tab. Gen., 1775. Type *Dasypus novemcinctus* Linnæus.

Tatusia F. Cuv., in Less. Man. Mamm., 1827, p. 309. (Part.)

Cachicamus McMurt., G. Cuv. Anim. Kingd., 1, 1831, p. 163.

FIG. IV. TATU NOVEMCINCTUM. NINE-BANDED ARMADILLO.

43. Tatu novemcinctum (Linnæus).

Dasypus novemcinctus Linn., Syst. Nat., 1, 1758, p. 51.

Dasypus octo-cinctus Schreb., Säugth., II, 1775, p. 222, Tab. LXXIII, LXXVI.

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Dasypus peba Desm., Mamm., 1820, p. 368. Gray, Cat. Carniv. Pachyderm. & Edent. Mamm. Brit. Mus., 1869, p. 377.

Dasypus longicaudus Max., Beitr. Naturg. Bras., II, 1825, p. 531.

Dasypus mexicanus fenestratus Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1864, p. 180.

Tatusia leptorhynchus Gray, Hand-L. Edent. Thick-skin. & Rumin. Mamm. Brit. Mus., 1873, p. 15, pl. I, figs. 3, 4.

Cabassous novemcinctus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 4, pl. I. Zoöl. Ser.

Tatu novemcinctum Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 33, figs. 9, XIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 13. Zoöl. Ser.

NINE-BANDED ARMADILLO.

1. Adult — P. Texas. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult — P. Cameron County, Texas. C. K. Worthern.

3–4. Adult ♂ Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.

5. Adult ♂ Coll. Sabinas, State of Coahuila. Mexico. Heller & Barber.

Family IV. **Manidæ. Pangolins.**

Genus 32. **Manis.**

Manis Linn., Syst. Nat., I, 1758, p. 36. Type *Manis pentadactyla* Linnæus.

Pholidotus Briss., Regn. Anim., 1762, p. 18.

Phataginus Rafin., Analyse de la Nature, 1815, p. 57. (nomen nudum.) *Id.* Ann. Gén. Scien. Phys. Brux., VII, 1820, p. 214.

Phatages Sundev., K. Sven. Vet.-Akad. Handl. Stockh., 1843, pp. 258, 273. Gray, Proc. Zoöl. Soc., 1865, p. 368.

Phatagin Gray, Proc. Zoöl. Soc. Lond., 1865, p. 363, 2 figs. in text. *Id.* Cat. Carniv. Pachyderm. & Edent. Mamm. Brit. Mus., 1869, p. 368.

Smutsia Gray, Proc. Zoöl. Soc., 1865, p. 369.

Triglochinopholis Fitzin., Sitzungsb., Math.-Nat. Cl. K. Akad. Wiss. Wien., LXV, 1872, Abth. I, p. 27.

Pangolin Gray, Hand-L. Edent. Thick-skin. & Rumin. Mamm. Brit. Mus., 1873, p. 8.

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44. Manis tetradactyla Linnæus.

Manis tetradactyla Linn., Syst. Nat., 1, 1766, p. 53.

Manis macroura Erxl., Syst. Regn. Anim., 1777, p. 101.

Manis africani var.? Desm., Mamm., 1820, p. 376.

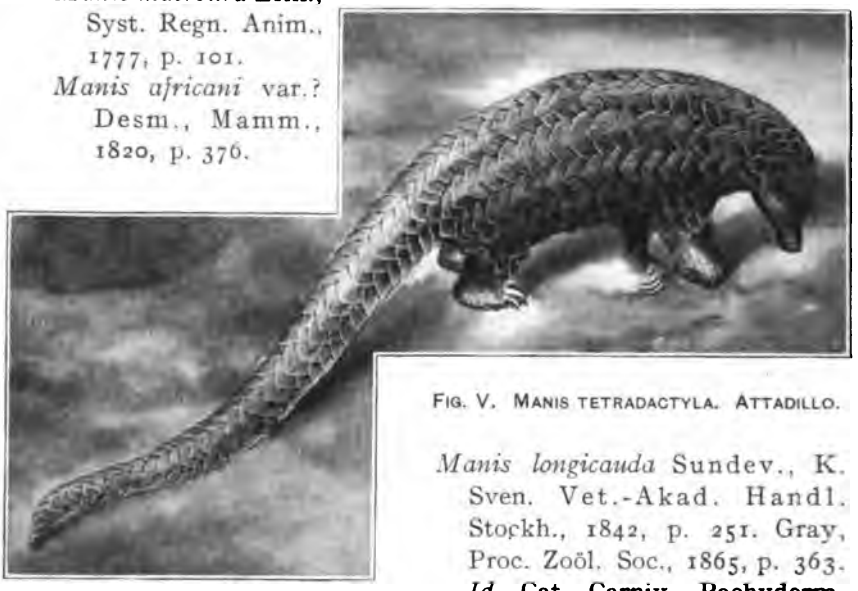

FIG. V. MANIS TETRADACTYLA. ATTADILLO.

Manis longicauda Sundev., K. Sven. Vet.-Akad. Handl. Stockh., 1842, p. 251. Gray, Proc. Zoöl. Soc., 1865, p. 363. *Id.* Cat. Carniv. Pachyderm. & Edent. Mamm. Brit. Mus., 1869, p. 367.

ATTADILLO, GAHLAH.

1. Adult — P. Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

45. Manis tricuspis Rafinesque.

Manis tricuspis Rafin., Ann. Gén. Scien. Phys. Brux., 1820, p. 214.

Manis 4-dactylus Thomp., Proc. Zoöl. Soc., 1834, p. 28.

Manis multiscutata Gray, Proc. Zoöl. Soc., 1843, p. 22. Fras., Zool. Typica, 1849, p. 15, pl. Gray, Proc. Zoöl. Soc., 1865, p. 363. *Id.* Cat. Carniv. Pachyderm. & Edent. Mamm. Brit. Mus., 1869, p. 368.

Manis tridentata Focillon, Rev. de Zool., 1850, p. 472, pl. 11.

PANGOLIN.

1. Adult — P. West Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

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Order IV. **Sirenia. Sirenians.**

Family I. **Trichechidæ.**

Genus 33. **Trichechus.**

Trichechus Linn., Syst. Nat., I, 1758, p. 34. Type *Trichechus manatus* Linnæus.

Manatus Brünn., Zool. Fund., 1772, pp. 34, 38, 39.

Halipaedisca Gistel, Naturg. Thierr. f. höhere Schul., 1848, p. 83.

46. Trichechus manatus Linnæus.

Trichechus manatus Linn., Syst. Nat., I, 1758, p. 34. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 37, fig. XIV, pls. IV, V. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 14. Zoöl. Ser.

Manatus latirostris Harl., Journ. Acad. Nat. Scien. Phil., 1824, p. 111. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 6, pl. III. Zoöl. Ser.

Manatus australis Tilesius, Jahrb. Naturg., I, 1802, p. 23.

FIG. VI. TRICHECHUS MANATUS. MANATEE.

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Manatus americanus Desm., Nouv. Dict. Hist. Nat., 1817, p. 262, pl. 96. (Part.)

Manatus fluviatilis Wagn., Schreb. Säugth., Suppl., 1846, pl. 379.

MANATEE. *Vacca de Agua* in Guatemala.

1. Adult — P. Florida. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult — Pres. Florida. C. B. Cory, Boston, Mass.

3–4. Adult ♂ Coll. Izabal, Guatemala. Heller & Barber.

5–6. Adult ♀ Coll. Izabal, Guatemala. Heller & Barber.

Family II. **Dugongidæ. Dugongs.**

Genus 34. **Dugong.**

Dugong Lacépède, Tabl. Mamm., 1799, p. 17. Type *Trichecus dugon* Müller.

Platystomus Fisch., Das Nationalmus. Naturg. Paris, II, 1803, p. 353.

Dugungus Tiedem., Zool., I, 1808, p. 554.

Halicore Illig., Prodr. Syst. Mamm. et Av., 1811, p. 140.

Odobenus (sic) Rafin., Analyse de la Nature, 1815, p. 60. (nec Briss., 1762.)

Dugongidus Gray, Lond. Med. Repos., XV, 1821, p. 309.

47. Dugong australis (Owen).

Halicore australis Owen, Jukes's Voy. of 'Fly,' II, 1847, Append, VI, p. 323, pl. 27, figs. 1, 3, 5.

DUGONG.

1. Adult — P. Australia. Ward's Nat. Scien. Establ., Rochester, N. Y.

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Order V. **Unguiata. Hoofed Mammals.**

SUBORDER I. ARTIODACTYLA.

SECTION A. SUINA.

Family I. **Suidæ. Pigs.**

Genus 35. **Sus.**

Sus Linn., Syst. Nat., I, 1758, p. 49. Type *Sus scrofa* Linnæus.
Aper Pall., Miscell. Zool., 1766, p. 16, tab. II, IV, figs. 1, 2, 4.
Capriscus Glog., Hand- u. Hilfsb. Naturg., I, 1841, pp. XXXII, 130.
Centuriosus Gray, Proc. Zoöl. Soc., 1862, p. 17.
Gyrosus Gray, Cat. Bones Mamm. Brit. Mus., 1862, p. 278.
Eusus Gray, Proc. Zoöl. Soc., 1868, p. 32.
Euhys Gray, Cat. Carniv. Pachyderm. & Edent. Mamm. Brit. Mus., 1869, p. 339.

48. Sus scrofa Linnæus.
Sus scrofa Linn., Syst. Nat., I, 1758, p. 49. Gray, Cat. Carniv. Pachyderm. & Edent. Mamm. Brit. Mus., 1869, p. 337.
Sus setosus aper Bodd., Elench. Anim., I, 1785, p. 157.
Sus scrofa ferus Gmel.; Syst. Nat., 1788, p. 217.
Sus scrofa var. *barbarus* Sclat., Proc. Zoöl. Soc., 1860, p. 443.
Sus libycus Gray, Proc. Zoöl. Soc., 1868, p. 31.
Sus scrofa var. *nigripes* Blanf., Jour. Asiat. Soc. Beng., XLIV, 1875, p. 112.
WILD BOAR.
1. Adult ♂ P. France. Ward's Nat. Scien. Establ., Rochester, N. Y.

49. Sus papuensis Lesson & Garnot.
Sus papuensis Less. & Garn., Bull. Scien. Nat., VII, 1826, pp. 80, 96.
Porcula papuensis Fitzin., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien., 1864, p. 23. Gray, Cat. Carniv. Pachyderm. & Edent. Mamm. Brit. Mus., 1869, p. 339.
Sus aruensis Rosenb., Malay Archip., 1878, p. 362.

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THE BENE.

1. Adult — P. New Guinea. Ward's Nat. Scien. Establ., Rochester, N. Y.

50. Sus ahænobarbus Huet.

Sus ahænobarbus Huet, Le Natural., 1888, p. 5, fig. 1. Elliot, Pub. Field Columb. Mus., 1, 1896, p. 67. Zoöl. Ser.

Sus palavensis Nehring, Abh. Zool. Mus. Dresd., 1889, pp. 22, 32.

Sus balabacensis F.-Major, Ann. Mag. Nat. Hist., 6th Ser., XIX, 1897, p. 534.

ISLAND OF PALAWAN WILD HOG.

1. Adult ♂ P. Island of Palawan, Philippine Archipelago. J. B. Steere.
2. Adult ♀ P. Island of Palawan, Philippine Archipelago. J. B. Steere.

51. Sus celebensis Müller & Schlegel.

Sus celebensis Müll. & Schleg., Verh. Zoogd. Ind. Arch., 1842, pl. 28 bis, fig. 1.

Sus timorensis Müll. & Schleg., Verh. Zoogd. Ind. Arch., 1842, pp. 42. 173, 178, pl. 31, figs. 1–3

Sus philippinensis Nehring, Sitzungsb. Geo. Nat. Fr., 1886, p. 83. (note.)

Sus marchei Huet, Le Natural., 1888, p. 6, fig. 3. (nec skull.)

MÜLLER'S WILD HOG.

1. Adult ♂ P. Philippine Islands. J. B. Steere.

Genus 36. **Macrocephalus.**

Macrocephalus Frisch, Das Nat.-Syst. vierf. Thiere, in Tabellen, 3, Tabl. Gen., 1775. Type *Aper æthiopicus* Pallas.

Phaco-choerus F. Cuv., in G. Cuv. Règn. Anim., 1817, p. 236.

Eureodon Fisch., Mém. Soc. Imp. Nat. Mosc., v. 1817, p. 373.

Phōcochōrus Voigt, Uebers. Naturg., 1819, p. 422.

Phascochaeres Rüpp., Atl. Reis. nörd. Africa, 1, 1826, p. 61.

Phacellochoerus Hemp. & Ehr., Sym. Phys., Mamm., II, 1832, Sig. qq. Nov.

Dinochœrus Glog., Hand- u. Hilfsb. Naturg., 1, 1841, pp. XXXII, 131.

Koiropotamus Gray, List. Spec. Mamm. Brit. Mus., 1843, p. XXVII.

Choiropotamus Gray, List. Spec. Mamm. Brit. Mus., 1843, p. 185.

Potamochœrus Gray, Proc. Zoöl. Soc., 1852, p. 129, pl. XXXIV.

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52. Macrocephalus africanus (Gmelin).

Sus africanus Gmel., Syst. Nat., 1, 1788, p. 220.

Potamochœrus africanus Gray, Proc. Zoöl. Soc., 1852, p. 131; 1868, p. 34.

Phacochœrus æliani Sclat., Proc. Zoöl. Soc., 1869, p. 276, pl. xx.

Phacochœrus africanus Elliot, Pub. Field Columb. Mus., 1, 1897, p. 109. Zoöl. Ser.

FIG. VII. MACROCEPHALUS AFRICANUS. WART HOG.

WART HOG. *Dofar* in Somaliland.

1. Adult ♂ Coll. Mandera, Somaliland, E. Africa. D. G. Elliot.
2. Adult ♀ Coll. Hullieh, Somaliland, E. Africa. D. G. Elliot.
3. Juv. ♀ Coll. Mandera, Somaliland, E. Africa. D. G. Elliot.
4. Juv. ♂ Coll. Anouf Prairie, Somaliland, E. Africa. D. G. Elliot.

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5–6. Juv. ♀ Coll. Anouf Prairie, Somaliland, E. Africa. D. G. Elliot.

53. Macrocephalus larvatus (F. Cuvier).

Potamochærus larvatus F. Cuv., Mém. Mus. Hist. Nat., VIII, 1822, p. 447, pl. 22. F.-Major, Proc. Zoöl. Soc., 1897, p. 363, pls. XXV, 26, fig. 2, p. 365, figs. 1–2.

Potamochærus edwardsi Grandidier, Rev. Mag. Zool., 1867, p. 318. Sclat., Proc. Zoöl. Soc., 1894, p. 92.

MADAGASCAR WILD HOG.

1. Adult ♀ P. Madagascar. C. I. Forsyth-Major.

Family II. **Tagassuidæ. Peccaries.**

Genus 37. **Tagassu.**

Tagassu Frisch., Das Nat.-Syst. vierf. Thiere, in Tabellen, 3, Tab. Gen., 1775. Type *Sus tajacu* Linnæus.

Tayassu Fisch., Zoogn., III, 1814, p. 284.

Dicotyles G. Cuv., Règn. Anim., I, 1817, p. 237.

Notophorus Fisch., Mém. Soc. Imp. Nat. Moscou, V, 1817, pp. 373, 418.

Adenonotus Brookes, Prodr. Syn. Anim., II, 1828.

Subgenus A. **Tagassu.**

54. Tagassu angulatum (Cope).

Dicotyles angulatus Cope, Amer. Nat., XXIII, 1889, p. 147.

Dicotyles tajacu Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 33, pl. 11. Zoöl. Ser. (Part.)

Tagassu angulatum Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. 1, 1904, p. 63, pls. XXV, XXVI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 35. Zoöl. Ser.

TEXAN PECCARY. *Moran, Jabali*, in Mexico.

1. Adult ♂ P. Texas. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♀ P. Texas. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Tagassu angulatum humerale (Merriam).

Tayassu angulatus humeralis Merr., Proc. Biol. Soc. Wash., XIV, 1901, p. 122.

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Tagassu angulatum humerale Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 63. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 35. Zoöl. Ser.

ARMERIA PECCARY.

1. Adult ♀ Pres. Jalapa, State of Vera Cruz, Mexico. Kennedy & Stevenson.
2. Juv. ♂ Pres. Jalapa, State of Vera Cruz, Mexico. Kennedy & Stevenson.

3–9. Adult ♂ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

10–12. Adult ♀ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

13. Adult ♂ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

14–17. Adult ♀ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

55. Tagassu torvus (Bangs).

Tayassu torvus Bangs, Proc. Biol. Soc. Wash., XII, 1898, p. 164.

FIERCE PECCARY.

1–2. Adult — P. Naranja, Colombia, S. America. H. H. Smith.

Subgenus B. Olidosus.

Dicotyles Gray, Proc. Zoöl. Soc., 1868, p. 45. (nec Cuvier.)
Olidosus Merr., Proc. Biol. Soc. Wash., XIV, 1901, p. 120.

56. Tagassu pecari (Fischer).

Tayassu pecari Fisch., Zoogn., III, 1814, p. 285.
Sus albirostris Illig., Abhandl. K. Preuss. Akad. Wiss. Berl., 1815, p. 115.
Dicotyles labiatus Cuv., Règn. Anim., I, 1817, p. 238.
Tagassu pecari Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 66. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 37. Zoöl. Ser.

WHITE-LIPPED PECCARY. *Warree*, *Carablanca*, in Costa Rica.

1. Adult — P. Naranja, Colombia, S. America. H. H. Smith.

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SECTION B. TYLOPODA.

Family III. **Camelidæ. Camels and Llamas.**

Genus 38. **Camelus.**

Camelus Linnæus, Syst. Nat., I, 1758, p. 65. Type *Camelus dromedarius* Linnæus.

57. Camelus dromedarius Linnæus.

Camelus dromedarius Linn., Syst. Nat., I, 1758, p. 65.

Camelus arabicus Desmoul., Dict. Class. Hist. Nat., III, 1825, p. 452.

Camelus dromas Pall., Zoogr. Ross.-Asiat., 1831, p. 197.

DROMEDARY.

1. Adult ♂ Pres. ————? Pure Food Company, Chicago.

58. Camelus bactrianus Linnæus.

Camelus bactrianus Linn., Syst. Nat., I, 1758, p. 65. et Auct.

BACTRIAN OR TWO-HUMPED CAMEL.

1. Adult ♂ Pres. ——— ? Menagerie, Lincoln Park, Chicago.

Genus 39. **Lama.**

Lama Frisch, Das Nat.-Syst. vierf. Thiere, in Tabellen, 4, Tab. Gen., 1775. Type "*Das Amerikanische Kameel*" = *Camelus laçma* Cuvier.

Lacma Tiedem., Zool., 1808, pp. XV, 420.

Llacma Illig., Abhandl. K. Akad. Wiss. Berl., (1811) 1815, p. 48.

Auchenia Illig., Prodr. Syst. Mamm. et Av., 1811, p. 103.

Auchenias Wagn., Archiv f. Naturg., 1843, p. 349.

59. Lama huanacha Molina.

Lama huanachus Molina, Sagg. Stor. Nat. Chili, I, 1782, p. 317. Thomas, Proc. Zoöl. Soc., 1891, p. 387.

Auchenia huanaca Griff., Anim. Kingd., V, 1827, p. 299.

Llama guanacus Gray, Cat. Rumin. Mamm. Brit. Mus., 1872, p. 101.

HUANACO.

1. Adult — P. Peru, S. America. Ward's Nat. Scien. Establ., Rochester, N. Y.

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60. Lama glama (Linnæus).
Camelus glama Linn., Syst. Nat., I, 1758, p. 65.
Lama glama Thos., Proc. Zoöl. Soc., 1891, p. 387.
LLAMA. *Domestic race* of *L. huanacha* Mol.
1–3. Adult — P. Peru, S. America. Ward's Nat. Scien. Establ., Rochester, N. Y.

61. Lama pacos (Linnæus).
Camelus pacos Linn., Syst. Nat., I, 1758, p. 66.
Lama pacos Thos., Proc. Zoöl. Soc., 1891, p. 387.
ALPACA. *Domestic race* of *L. huanacha* Mol.
1. Adult — P. Peru, S. America. Ward's Nat. Scien. Establ., Rochester, N. Y.

62. Lama vicugna Molina.
Lama vicugna Molina, Sagg. Stor. Nat. Chile, I, 1782, p. 313. Thos., Proc. Zoöl. Soc., 1891, p. 387.
VICUGNA.
1. Adult — P. Peru, S. America. Ward's Nat. Scien. Establ., Rochester, N. Y.

SECTION C. TRAGULINA. CHEVROTAINS.

Family IV. **Tragulidæ.**

Genus 40. **Tragulus.**

Tragulus Brisson, Regn. Anim., 1762, pp. 12, 65. Type *Tragulus indicus* Brisson.
Meminna Gray, Lond. Med. Repos., xv, 1821, p. 307. (nec Fischer, 1814.)

63. Tragulus meminna (Erxleben).
Moschus meminna Erxl., Syst. Regn. Anim., 1777, p. 322.
Meminna indica Gray, List Spec. Mamm. Brit. Mus., 1843, p. 172.
Tragulus meminna Thos., Proc. Zoöl. Soc., 1891, p. 385.
INDIAN CHEVROTAIN.
1. Adult ♂ P. Ceylon. Ward's Nat. Scien. Establ., Rochester, N. Y.

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SECTION D. PECORA. RUMINANTS.

Family V. **Cervidæ. Deer.**

Subfamily I. **Moschinæ.**

Genus 41. **Moschus. Musk-deer.**

Moschus Linn., Syst. Nat., I, 1758, p. 66. Type *Moschus moschiferus* Linnæus.

Odontodorcus Gistel, Naturg. Thierr. fur höhere Schulen, 1848, p. 82.

64. Moschus moschiferus Linnæus.

Moschus moschiferus Linn., Syst. Nat., I, 1758, p. 66.

Moschus sibiricus Esch., Isis, 1830, p. 606.

Moschus moschiferus altaicus Brant, Medicin. Zool., II, 1833, p. 347.

Moschus chrysogaster Hodg., Journ. Asiat. Soc. Beng., VIII, 1839, p. 203.

Moschus leucogaster Hodg., Journ. Asiat. Soc. Beng., VIII, 1839, p. 203

Moschus saturatus Hodg., Journ. Asiat. Soc. Beng., VIII, 1839, p. 203.

Moschus moschiferus fasciatus Milne-Edw., Ann. Scien. Nat., Sér. 5me, II, 1864, p. 119.

MUSK-DEER.

1. Adult ♂ P. Altai Mountains, Asia. J. Friesser.
2. Adult ♀ P. Altai Mountains, Asia. J. Friesser.

Subfamily II. **Cervinæ.**

Genus 42. **Muntiacus.**

Muntiacus Rafin., Analyse de la Nature, 1815, p. 56. Type *Cervus muntjak* Zimmermann.

Cervulus Blainv., Bull. Soc. Philom. Paris, 1816, p. 74.

Stylocerus! H. Smith, Griff. Anim. Kingd., V, 1827, p. 319.

Prox Ogilby, Proc. Zoöl. Soc., 1837, p. 135.

Dicrocerus! Lartet, Compt. Rend., V, 1837, p. 158.

Dicroceros! Agass., Nomen. Zool., Addend., 1846, p. 4.

Dicroceras Bedd., Cambrid. Nat. Hist., Mamm., X, 1902, p. 301.

65. Muntiacus muntjac (Zimmermann).

Cervus muntjak Zimm., Geog. Gesch., II, 1780, p. 131.

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Cervus vaginalis Bodd., Elench. Anim., I, 1785, p. 136.
Cervulus moschatus Blainv., Bull. Soc. Philom. Paris, 1816, p. 77.
Cervus aureus H. Smith, Griff. Anim. Kingd., IV, 1827, p. 148.
Cervus ratwa Hodg., Asiat. Research., XVIII, Pt. 2, 1833, p. 139, pl. I.
Cervus melas Ogilby, Royle's Bot. Himal., 1839, p. LXXIII.
Styloceros! muntjacus Kelaart, Prodr. Faun. Zeyl., 1852, p. 85.

BARKING DEER.

1. Adult ♂ P. South West India. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♂ P. Borneo. Menage Scientific Exped. Bourns & Worcester.
3. Adult ♀ P. Borneo. Menage Scientific Exped. Bourns & Worcester.

Genus 43. **Elaphodus.**

Elaphodus A. Milne-Edw., Nouv. Archiv. Mus. Hist. Nat. Paris, 1871, p. 93. Type *Elaphodus cephalophus!* A. Milne-Edwards.
Lophotragus Swinh., Proc. Zoöl. Soc., 1874, p. 453, pl. LIX.

66. Elaphodus cephalolophus A. Milne-Edwards.
Elaphodus cephalophus! A. Milne-Edw., Nouv. Arch. Mus. Hist. Nat. Paris, 1871, p. 93.

CHINESE MUNTJAC.

1. Adult ♂ Exch. Ta-tsien-lou, China. Mus. Hist. Nat. Paris.

Genus 44. **Hydrelaphus.**

Hydrelaphus Lydekker, Deer of all Lands, 1898, p. 219. Type *Hydropotes inermis* Swinhoe.
Hydropotes Swinh., Proc. Zoöl. Soc., 1870, p. 90. (nec *Hydropota* Rondani, 1861, Diptera.)

67. Hydrelaphus inermis (Swinhoe).
Hydropotes inermis Swinh., Proc. Zoöl Soc., 1870, p. 89.

CHINESE WATER DEER.

1. Adult ♂ P. Vicinity of Shanghai, China. Rowland Ward & Co.

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Genus 45. **Rangifer. Caribou.**

Rangifer Frisch, Das Nat.-Syst. vierf. Thiere, in Tabellen, 3, Tab. Gen., 1775. Type *Rangifer lapponicus* Frisch=*Cervus tarandus* Linnæus.

Tarandus Billberg, Syn. Faun. Scandinav., Mamm., 1, Conspec. A. D. 1828, p. 22.

68. Rangifer tarandus (Linnæus).

Cervus tarandus Linn., Syst. Nat., 1, 1766, p. 93.

Cervus guettardi Desm., Mamm., II, 1822, p. 447.

Cervus tarandus schottini Sternb., Isis, 1828, p. 482.

Rangifer tarandus Gray, List Spec. Mamm. Brit. Mus., 1843, p. 181.

REINDEER.

1. Adult ♂ P. Norway. Ward's Nat. Scien. Establ., Rochester, N. Y.

69. Rangifer caribou (Gmelin).

Cervus tarandus caribou Gmel., Syst. Nat., 1, 1788, p. 177.

Cervus tarandus var. *β sylvestris* Richard., Faun. Bor. Amer., Mamm., 1, 1829, p. 250.

Cervus hastalis Agass., Sillim. Journ., 1847, p. 436.

Rangifer caribou Aud. & Bachm., Quad. N. Amer., III, 1853, p. III. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 35, pl. XIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 37. Zoöl. Ser.

CARIBOU.

1. Adult ♂ P. Maine. Ward's Nat. Scien. Establ., Rochester, N. Y.

70. Rangifer montanus Seton-Thompson.

Rangifer montanus Seton-Thompson, Ottawa Nat., 1899, p. 129. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 36. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 38. Zoöl. Ser.

MOUNTAIN CARIBOU.

1–2. Juv. ♂ P. 400 miles N. E. Edmonton, Brit. Columbia, Canada. C. F. Periolat.

3–4. Adult ♀ P. 400 miles N. E. Edmonton, Brit. Columbia, Canada. C. F. Periolat.

71. Rangifer terrænovæ Bangs.

Rangifer terrænovæ Bangs, Private Pub., Boston, 1896. Allen, Bull. Amer. Mus. Nat. Hist. N. Y., 1896, p. 233. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 36. Zoöl. Ser. *Id.*

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Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 38. Zoöl. Ser.

NEWFOUNDLAND CARIBOU.

1–3. Adult ♂ Pres. Newfoundland. S. V. Kennedy.
4–5. Adult ♀ Pres. Newfoundland. S. V. Kennedy.
6. Juv. ♀ Pres. Newfoundland. S. V. Kennedy.

72. Rangifer stonii Allen.

Rangifer stonei Allen, Bull. Amer. Mus. Nat. Hist. N. Y., 1901, p. 143. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, Suppl., p. 483. Zoöl. Ser. *Id.* Pub. Field Columb. Mus., III, 1901, p. 59, pl. XIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 39. Zoöl. Ser.

STONE'S CARIBOU.

1. Adult ♂ P. Kenai Peninsula, Alaska. C. F. Periolat.

73. Rangifer arcticus (Richardson).

Cervus tarandus var. *a arctica* Rich., Faun. Bor. Amer:. Mamm., I, 1829, p. 241.

Rangifer arcticus Elliot, Syn. N. Am. Mamm., F. C. M. Pub ., II, 1901, p. 37. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 40. Zoöl. Ser.

BARREN GROUND CARIBOU.

1. Adult ♂ P. Northern Alaska. E. A. McIlhenny.
2. Adult ♀ P. Northern Alaska. E. A. McIlhenny.
3. Juv. — P. Northern Alaska. E. A. McIlhenny.

Genus 46. **Alce.**

Alce Frisch, Das Nat.-Syst. vierf. Thiere, in Tabellen, 3, Tab. Gen., 1775. H. Smith, Griff. Anim. Kingd., V, 1827, p. 303. Type *Cervus alces* Linnæus.

Alces Jard., Nat. Libr., Mamm., III, 1835, p. 125.

Alcelaphus Glog., Hand- u. Hilfsb. Naturg., 1841, p. 143. (nec Blainville, 1816.)

Paralces Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1902, p. 160.

74. Alce alces (Linnæus).

Cervus alces Linn., Syst. Nat., I, 1758, p. 66.

Alces americanus Jard., Nat. Libr., Mamm., III, 1835, p. 125. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 38, pl. XIV. Zoöl. Ser.

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Alces machlis Ogilby, Proc. Zoöl. Soc., 1836, p. 135.
Alces palmatus Gray, List Spec. Mamm. Brit. Mus., 1843, p. 182.
Cervus lobatus Agass., Proc. Bost. Soc. Nat. Hist., 1846, p. 188.
Alces muswa Rich., Zoöl. Voy. 'Herald', Mamm., 1852, p. 66.
Alce alces Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 41. Zoöl. Ser.

MOOSE.

1. Adult ♂ P. Nova Scotia, Canada. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♀ P. Nova Scotia, Canada. Ward's Nat. Scien. Establ., Rochester. N. Y.

75. Alce gigas (Miller).

Alces gigas Miller, Proc. Biol. Soc. Wash., XIII, 1899, p. 57. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 38. Zoöl. Ser.
Alce gigas Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 41. Zoöl. Ser.

ALASKAN MOOSE.

1–2. Adult ♂ P. Kenai Peninsula, Alaska. C. F. Periolat.
3–4. Adult ♀ P. Kenai Peninsula, Alaska. C. F. Periolat.
5. Juv. ♀ P. Kenai Peninsula, Alaska. C. F. Periolat.

Genus 47. **Cervus.**

Cervus Linn., Syst. Nat., I, 1758, p. 66. Type *Cervus elaphus* Linnæus.
Rusa H. Smith, Griff. Anim. Kingd., V, 1827, p. 309.
Axis H. Smith, Griff. Anim. Kingd., V, 1827, p. 312.
Hippelaphus Bonap., Iconogr. Faun. Ital., I, 1836, p. 4. (nec Reichenb., 1835.)
Hyelaphus Sundev., K. Sven. Vet.-Akad. Handl. Stockh., 1846, p. 181.
Pseudaxis Gray, Cat. Ruminan. Mamm. Brit. Mus., 1872, p. 70.
Elaphoceros! Fitzin., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien, LXVIII, 1874, Abth. I, p. 602.

Subgenus A. **Rusa.**

76. Cervus unicolor Bechstein.

Cervus unicolor Bechst., in Penn. Allgem. Uebers. vierf. Thiere, I, 1799, p. 112.
Cervus albicornis Bechst., in Penn. Allgem. Uebers. vierf. Thiere, I, 1799. p. 112.

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Cervus niger Blainv., Bull. Soc. Philom. Paris, 1816, p. 76.
Cervus aristotelis Cuv., Ossem. Foss., IV, 1825, p. 503.
Cervus leschenaultii Cuv., Ossem. Foss., IV, 1825, p. 506.
Cervus heterocervus Hodg., Journ. Asiat. Soc. Beng., X, 1841, p. 721.

SAMBAR.

1. Adult ♂ P. India. Ward's Nat. Scien. Establ., Rochester, N. Y.

Subgenus B. **Pseudaxis.**

77. Cervus hortulorum Swinhoe.

Cervus pseudaxis Gray, Proc. Zoöl. Soc., 1861, p. 236. (nec Eydoux & Souleyet.)
Cervus hortulorum Swinh., Proc. Zoöl. Soc., 1864, p. 169.
Cervus dybowskii Taczanow., Proc. Zoöl. Soc., 1876, p. 123.

PEKIN SIKA.

1. Adult ♂ P. East Siberia. J. F. G. Umlauff.
2. Adult ♀ P. East Siberia. J. F. G. Umlauff.

78. Cervus culionensis Elliot.

Cervus culionensis Elliot, Pub. Field Columb. Mus., I, 1896, pp. 68, 157.

CALAMIANES DEER.

1. Adult ♂ Type. P. Culion Island, Calamian Group, Philippine Archipelago. Menage Scientific Exped. Bourns & Worcester.
2. Adult ♀ Paratype. P. Culion Island, Calamian Group, Philippine Archipelago. Menage Scientific Exped. Bourns & Worcester.

***79. Cervus steerii** Elliot.

Cervus steerii Elliot, Pub. Field Columb. Mus., I, 1896, p. 72. Zoöl. Ser.

STEERE'S PIGMY DEER.

1. Adult ♂ Type. P. Basilan Island, Philippine Archipelago. J. B. Steere.

80. Cervus canadensis (Erxleben).

Cervus elaphus canadensis Erxleb., Syst. Regn. Anim., 1777, p. 305.

* Mr. Lydekker in the "Deer of all Lands" refers this form to *C. nigricans* Brooke. To settle this question satisfactorily it will be necessary to get together specimens of the two forms, as the best descriptions often mislead. From my recollection of the type of *C. steerii* I did not think it was the same as *C. nigricans* when I examined the type of that animal in London, and its diminutive size precludes it from any comparison with *C. philippinus* H. Smith.

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Cervus wapiti Barton, Journ. Med. & Physc. Phil., III, 1808, p. 36.
Cervus strongyloceros! Rich., Faun. Bor. Amer., Mamm., I, 1829, p. 251.
Cervus canadensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 34, pl. XII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 41. Zoöl. Ser.

WAPITI, EASTERN ELK.

1. Adult ♂ P. —— ? Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♀ P. —— ? Ward's Nat. Scien. Establ., Rochester, N. Y.
3. Adult ♂ P. —— ? C. E. Akeley.
4. Adult ♀ P. —— ? C. E. Akeley.
5. Juv. — P. —— ? C. E. Akeley.

a. *Cervus canadensis occidentalis* (Smith).
Cervus occidentalis H. Smith, Griff. Anim. Kingd., IV, 1827, p. 101.
Cervus roosevelti Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 271.
Cervus canadensis occidentalis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 34. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 42. Zoöl. Ser.

PACIFIC COAST WAPITI.

1–5. Adult ♂ Coll. Head waters of the Bogashiel River, Olympic Mountains, Clallam County, Washington. D. G. Elliot.
6–7. Adult ♀ P. Head waters of the Elwah River, Olympic Mountains, Clallam County, Washington. A. Baumann.
8. Juv. ♀ P. Head waters of the Elwah River, Olympic Mountains, Clallam County, Washington. C. C. Bowmann.

Subgenus C. **Dama.** Fallow Deer.

Alce Blumenb., Handb. Naturg., 6te Aufl., 1799, p. 697. (nec Frisch.)
Dama H. Smith, Griff. Anim. Kingd., V, 1827, p. 306.
Megaceros! Owen, Rep. Brit. Assoc., 1844, p. 237.
Platyceros! Wagn., Schreb. Säugth., Suppl., IV, 1854, p. 347.
Dactyloceros! Wagn., Schreb. Säugth., Suppl., V, 1855, p. 352.
Palmatus Giebel, Säugth., 1859, p. 351.

81. Cervus dama Linnæus.
Cervus dama Linn., Syst. Nat., I, 1758, p. 67.

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Cervus platyceros! Cuv., Tab. Élém. Hist. Nat., 1798, p. 160.
Dama vulgaris Gray, List Spec. Mamm. Brit. Mus., 1843, p. 181.
FALLOW DEER.
1 Adult ♂ P. —— ? Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♂ P. Vosges, France. Deyrolle Fils.

Genus 48. **Capreolus.**

Capreolus Frisch, Das Nat.-Syst. vierf. Thiere, in Tabellen, 3, Tab. Gen., 1775. Type "Das Rehe" = *Cervus capreolus* Linnæus.

82. Capreolus capreolus (Linnæus).
Cervus capreolus Linn., Syst. Nat., 1, 1758, p. 68.
Capreolus vulgaris Fitzin., Beitr. Landesk. österreichs., 1, 1832, p. 317.
Capreolus europæus Glog., Hand- u. Hilfsb. Naturg., 1841, p. 140.
Capreolus capræa Gray, List Spec. Mamm. Brit. Mus., 1843, p. 917.
ROEBUCK.
1. Adult ♂ P. Germany. Ward's Nat. Scien. Establ., Rochester, N. Y.

83. Capreolus pygargus (Pallas).
Cervus pygargus Pallas, Reis. Russ. Reichs, 1, 1771, p. 453.
Capreolus pygargus Gray, List Spec. Mamm. Brit. Mus., 1843, p. 176.
SIBERIAN ROE.
1. Adult ♂ Exch. Irkutsk, Central Asia. Mus. Hist. Nat. Paris.
2. Adult ♂ Summer coat. Exch. Irkutsk, Central Asia. Mus. Hist. Nat. Paris.
3. Adult ♀ Exch. Irkutsk, Central Asia. Mus. Hist. Nat. Paris.
4. Adult ♂ P. Amur District, East Siberia. J. F. G. Umlauff.
5. Adult ♀ P. Amur District, East Siberia. J. F. G. Umlauff.

Genus 49. **Odontocœlus.**

Odocoileus (sic) Rafin., Atlantic Jour., 1, 1832, No. 3, p. 109, fig. Type *Odocoileus! speleus* Rafinesque = ? *Cervus dama americanus* Erxleben.
Mazama H. Smith, Griff. Anim. Kingd., v, 1827, p. 314. (nec Rafinesque, 1817.)

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Dorcelaphus Glog., Hand-u. Hilfsb. Naturg., 1841, pp. XXXIII, 140.

Cariacus Less., Nouv. Tabl. Règn. Anim., 1842, p. 173.

Blastocerus Wagn., Schreb. Säugth., Suppl., IV, 1844, p. 366, Taf. CCLI B, CCXLVIII F.

Macrotis Wagn., Schreb. Säugth., Suppl., IV, 1844, pp. 368–372. (nec Dejean, 1833, Coleopt.)

Reduncina Wagn., Schreb. Säugth., Suppl., IV, 1844, p. 373, Taf. CCXLVII H.

Eucervus Gray, Ann. Mag. Nat. Hist., 3d Ser., XVIII, 1866, p. 338.

Otelaphus Fitzing., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien., LXVIII, Abth. I, 1874, pp. 347, 356.

Gymnotis Fitzing., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien., LXXVIII, Abth. I, 1879, p. 343.

Subgenus A. Odontocœlus.

84. Odontocœlus americanus (Erxleben).

Cervus dama americanus Erxl., Syst. Regn. Anim., 1777, p. 312.

Cervus virginianus Bodd., Elench. Anim., I, 1785, p. 136.

Odocoileus! americanus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 40. Zoöl. Ser.

Odontocœlus americanus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 43. Zoöl. Ser.

VIRGINIAN WHITE-TAILED DEER.

1–4. Adult ♂ P. Florence Co., Wisconsin. C. E. Akeley.
5–8. Adult ♀ P. Florence Co., Wisconsin. C. E. Akeley.
9–16. Juv. — P. Florence Co., Wisconsin. C. E. Akeley.
17. Adult ♂ Albino. Pres. Minnesota. E. E. Ayer.

a. Odontocœlus americanus couesi (Rothrock MS.).

Cervus mexicanus Baird, N. Amer. Mamm., 1857, p. 653. (nec Gmel.)

Cervus virginianus var. *couesi* Coues & Yarrow, in Wheeler's Geog. & Geol. Surv. W. 100th Merid., V, 1875, p. 72.

Odocoileus! americanus couesi Elliot, Syn. N. Amer. Mamm., F. C. M. Pub., II, 1901, p. 40. Zoöl. Ser.

Odontocœlus americanus couesi Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 70. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 45. Zoöl. Ser.

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COUES'S WHITE-TAILED DEER.

1–2. Adult ♂ P. Santa Cruz Mountains, State of Sonora, Mexico. W. W. Price.

FIG. VIII. ODONTOCŒLUS A. COUESI. COUES'S WHITE-TAILED DEER.

3. Juv. ♂ P. Santa Cruz Mountains, State of Sonora, Mexico. W. W. Price.

b. Odontocœlus americanus texensis (Mearns).

Dorcelaphus texanus! Mearns, Proc. Biol. Soc. Wash., XII, 1898, p. 23.

Odocoileus! americanus texensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 40. Zoöl. Ser.

Odontocœlus americanus texensis Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 70, pls. XXIX, XXX. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 45. Zoöl. Ser.

TEXAN WHITE-TAILED DEER.

1–6. Adult ♂ Pres. Casas Grandes, State of Chihuahua, Mexico. Kennedy & Stevenson.

7. Adult ♀ Pres. Casas Grandes, State of Chihuahua, Mexico. Kennedy & Stevenson.

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8. Juv. ♂ Pres. Casas Grandes, State of Chihuahua, Mexico. Kennedy & Stevenson.
9. Juv. ♀ Pres. Casas Grandes, State of Chihuahua, Mexico. Kennedy & Stevenson.

85. Odontocœlus battyi Allen.

Odocoileus! battyi Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1903, p. 591.

Odontocœlus battyi Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 71. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 45. Zoöl. Ser.

BATTY'S WHITE-TAILED DEER.

1–8. Adult ♂ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.
9–11. Adult ♀ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.
12–16. Adult ♂ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.
17–23. Adult ♀ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.
24–34. Adult ♂ Coll. Cuatro Cienegas, State of Coahuila, Mexico. Heller & Barber.
35–38. Adult ♀ Coll. Cuatro Cienegas, State of Coahuila, Mexico. Heller & Barber.

86. Odontocœlus rothschildi (Thomas).

Dama rothschildi Thos., Novitat. Zool., IX, 1902, p. 136.

Odontocœlus rothschildi Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 72. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 46. Zoöl. Ser.

ROTHSCHILD'S WHITE-TAILED DEER.

1. Adult ♂ P. Coiba Island, Colombia. J. H. Batty.
2–3. Adult ♀ P. Coiba Island, Colombia. J. H. Batty.
4–5. Juv. ♀ P. Coiba Island, Colombia. J. H. Batty.

87. Odontocœlus columbianus (Richardson).

Cervus macrotis var. *β columbiana* Rich., Faun. Bor. Amer., Mamm., I, 1829, p. 257.

Odocoileus! columbianus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 41. Zoöl. Ser.

Odontocœlus columbianus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 48. Zoöl. Ser.

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COLUMBIAN BLACK-TAILED DEER.

1. Adult ♂ P. California. Ward's Nat. Scien. Establ., Rochester, N. Y.

2–3. Adult ♀ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

4–5. Adult ♂ Coll. Agness, Curry Co., Oregon. E. Heller.

a. Odontocœlus columbianus sitkensis Merriam.

Odocoileus! columbianus sitkensis Merr., Proc. Biol. Soc. Wash., XII, 1898, p. 100. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 42. Zoöl. Ser.

Odontocœlus columbianus sitkensis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 48. Zoöl. Ser.

SITKA BLACK-TAILED DEER.

1. Adult ♀ Coll. Hot Springs, Sitka, Alaska. D. G. Elliot.

2. Juv. ♀ Coll. Hot Springs, Sitka, Alaska. D. G. Elliot.

88. Odontocœlus hemionus (Rafinesque).

Cervus hemionus Rafin., Am. Month. Mag., I, 1817, p. 436.

Cervus macrotis Say, Narr. Long's Exped. Rocky Mts., II, 1823, p. 88.

Odocoileus! hemionus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 42. Zoöl. Ser.

Odontocœlus hemionus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 76. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 48. Zoöl. Ser.

MULE DEER.

1. Adult ♂ Coll. San Quentin, Lower California, Mexico. E. Heller.

2. Adult ♂ Coll. Long Cañon, Mt. Whitney, California. E. Heller.

3. Adult ♀ Coll. Long Cañon, Mt. Whitney, California. E. Heller.

4. Adult ♂ P. —— ? C. E. Akeley.

5. Adult ♀ P. —— ? C. E. Akeley.

6. Juv. ♀ P. —— ? C. E. Akeley.

a Odontocœlus hemionus californicus (Eaton).

Cervus macrotis var. *californicus* Eaton, Amer. Nat., 1876, p. 464.

Odocoileus! hemionus californicus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 43. Zoöl Ser.

Odontocœlus hemionus californicus Elliot, Mamm. Middle Amer.

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& W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 77. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 49. Zoöl. Ser.

CALIFORNIA MULE DEER.

1–2. Adult ♂ Coll. Hanson Laguna Mts., Lower California, Mexico. E. Heller.

3–4. Adult ♂ Coll. Santa Eulalia, San Pedro Martir Mts , Lower California, Mexico. E. Heller.

5. Adult ♀ Coll. Santa Eulalia, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

6–8. Adult ♂ Coll. Vallecitos, San Pedro Martir Mts , Lower California, Mexico. E. Heller.

9–12. Adult ♀ Coll. Vallecitos, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

13. Adult ♂ Coll. Parral, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

14. Adult ♀ Coll. Parral, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

Subgenus B. **Blastocerus.**

89. Odontocœlus bezoarticus (Linnæus).

Cervus bezoarticus Linn., Syst. Nat., I, 1758, p. 67.
Cervus campestris F. Cuv., Dict. Scien. Nat., VII, 1817, p. 484.
Cervus leucogaster Schreb., Säugth., V, 1817, p. 1127.
Cervus azaræ Wiegm., Isis, 1833, p. 954.
Cervus comosus Wagn., Schreb. Säugth., Suppl., IV, 1844, p. 368.

PAMPAS DEER.

1. Adult ♂ P. Uruguay. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 50. **Hippocamelus. Brockets.**

Hippocamelus Leuckart, Dissert. Inaug. de *Equo bisulco* Molinæ, 1816, p. 24. Type *Hippocamelus dubius* Leuckart = *Equus bisulcus* Molina.

Mazama Rafin., Amer. Month. Mag., I, 1817, p. 363.
Subulo H. Smith, Griff. Anim. Kingd., V, 1827, p. 318.
Passalites Glog., Hand – u. Hilfsb. Naturg., I, 1841, p. 140.
Cervequus Less., Nouv. Tabl. Règn. Anim., Mamm., 1842, p. 173.
Subula Less., Nouv. Tabl. Règn. Anim., Mamm., 1842, p. 174. (nec Schum., 1817.)

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Coassus Gray, List Spec. Mamm. Brit. Mus., 1843, p. 174.
Furcifer Wagn., Schreb. Säugth., Suppl., IV, 1844, p. 384. Sundev., K. Oversigt. Vet.-Akad. Handl. Stockh., 1844 (1846), p. 183.
Anomolocera Gray, Scientific Opinion, Lond., II, 1869, p. 385.
Xenelaphus Gray, Proc. Zoöl. Soc., 1869, p. 498.
Homelaphus Gray, Cat. Rumin. Mamm. Brit. Mus., 1872, p. 90.
Huamela Gray, Ann. Mag. Nat. Hist., 4th Ser., X, 1872, p. 445.
Creagroceros! Fitzin., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien., LXVIII, Abth. I, 1874, p. 348.
Nanelaphus Fitzin., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien., LXVIII, Abth. I, 1874, p. 360.
Doryceros! Fitzin., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien., LXVIII, Abth. I, 1874, p. 360.

Subgenus A. **Mazama.**

90. Hippocamelus sartori (Saussure).
Cervus sartorii Sauss., Rev. Mag. Zool., 2me Sér., XII, 1860, p. 252.
Mazama sartori Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 79, fig. XXXI, pl. XXXI. Zoöl. Ser.
Hippocamelus sartori Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 50. Zoöl. Ser.

FIG. IX. HIPPOCAMELUS SARTORI. SARTORI'S BROCKET.

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SARTORI'S BROCKET.

1. Adult ♂ Pres. Jalapa, State of Vera Cruz, Mexico. Kennedy & Stevenson.
2. Adult ♀ P. Mexico. Ward's Nat. Scien. Establ., Rochester, N. Y.

91. Hippocamelus nemorivagus (F. Cuvier).

Cervus nemorivagus F. Cuv., Dict. Scien. Nat., VII, 1817, p. 485.

WOOD BROCKET.

1. Adult — P. Guairaca, Colombia, South America. Am. Mus. Nat. Hist. N. Y. H. H. Smith.

Subgenus B. **Xenelaphus.**

92. Hippocamelus antisiensis (d'Orbigny).

Cervus antisiensis d'Orbig., Archiv. Mus. Paris, III, 1834, p. 91.

Anomolocera huamel Gray, Scient. Opinion, 1869, p. 384.

Xenelaphus leucotis Gray, Cat. Rumin. Mamm. Brit. Mus., 1872, p. 89.

Furcifer antisiensis Nehr., Sitzungsb. Gesc. Nat. Berl., 1895, p. 9.

PERUVIAN GUEMAL.

1. Adult ♂ Exch. Ecuador, South America. British Museum.

Family VI. **Giraffidæ.**

Genus 51. **Giraffa.**

Giraffa Briss., Regn. Anim., 1762, pp. 12, 37. Type *Giraffa giraffa* Brisson = *Cervus camelopardalis* Linnæus.

93. Giraffa camelopardalis (Linnæus).

Cervus camelopardalis Linn., Syst. Nat., I, 1758. p. 66.

GIRAFFE.

1. Adult — P. Abyssinia. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♀ Pres. ——? Ringling Bros.

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Family VII. **Antilocapridæ. Prong-horn Antelope.**

Genus 52. **Antilocapra.**

Antilocapra Ord., Journ. de Phys., LXXXVII, 1818, p. 149. Type *Antilope americana* Ord.

Dicranocerus! H. Smith, Griff. Anim. Kingd., IV, 1827, p. 169.

94. Antilocapra americana (Ord).

Antilope americana Ord, Guth. Geog., 2d. Am. ed., II, 1815, p. 292, desc. p. 308.

Antilocapra americana Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 43, pl. XVI. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 82. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 51. Zoöl. Ser.

PRONG-HORN.

1. Adult ♂ P. Nebraska. Ward's Nat. Scien. Establ., Rochester, N. Y.

2–3 Juv. — P. No record. C. E. Akeley.

a. Antilocapra americana mexicana Merriam.

Antilocapra americana mexicana Merr., Proc. Biol. Soc. Wash., XIV, 1901, p. 31. Elliot, Mamm. Middle Amer. & W. Indies,

FIG. X. ANTILOCAPRA A. MEXICANA. MEXICAN PRONG-HORN.

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F. C. M. Pub., IV, Pt. I, 1904, p. 82, fig. XXV, pls. XXXII, XXXIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 51. Zoöl. Ser.

MEXICAN PRONG-HORN. *Berendo* in Mexico.

1–9. Adult ♂ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

10–13. Adult ♀ Coll. Jaral, State of Coahúila, Mexico. Heller & Barber.

14. Juv. ♂ Coll. San Felipe, Gulf of California, Mexico. E. Heller.

Family VIII. **Bovidæ. Sheep, Oxen, etc.**

Subfamily I. **Bubalidinæ.**

Genus 53. **Bubalis. Hartebeests.**

Bubalis Frisch, Das Nat.-Syst. vierf. Thiere, in Tabellen, 2, Tab. Gen., 1775. Type *Antilope buselaphus* Pallas.

FIG. XI. BUBALIS SWAYNII. SWAYNE'S HARTEBEEST.

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Cerophorus Blainv., Bull. Soc. Philom. Paris, 1816, p. 74. (Part.)
Alcelaphus Blainv., Bull. Soc. Philom. Paris, 1816, p. 75.
Damalis H. Smith, Griff. Anim. Kingd., IV, 1827, p. 343.
Acronotus H. Smith, Griff. Anim. Kingd., IV, 1827, p. 346.
Bubalus Ogilby, Proc. Zoöl. Soc., 1836, p. 139. (nec Frisch, 1775.)

95. Bubalis swaynii Sclater.
Boselaphus caama Sclat., Proc. Zoöl. Soc., 1884, p. 539. (nec G. Cuv.)
Alcelaphus caama Giglioli, Ann. Mus. Genov., VI, 1888, p. 19. (nec G. Cuv.)
Bubalis swaynei Sclat., Proc. Zoöl. Soc., 1892, p. 98, pl. v. Elliot, Pub. Field Columb. Mus., I, 1897, p. 112. Zoöl. Ser. Sclat. & Thos., Book Antel., I, 1894–1900, p. 21, pl. II.
SWAYNE'S HARTEBEEST. *Sig* in Somali.
1–4. Adult ♂ Coll. Toyo Plain, Somaliland, East Africa. D. G. Elliot.
5. Adult ♂ Coll. Silo Plain, Somaliland, East Africa. D. G. Elliot.
6–10. Adult ♀ Coll. Toyo Plain, Somaliland, East Africa. D. G. Elliot.
11. Juv. ♀ Coll. Toyo Plain, Somaliland, East Africa D. G. Elliot.

96. Bubalis cokii (Günther).
Alcelaphus cokei Günth., Ann. Mag. Nat. Hist., XIV, 1884, p. 426.
Alcelaphus lichtensteini Pagenst., J. B. Mus. Hamb., II, 1884, p. 40. (nec Peters.)
Alcelaphus cookei Lyd., Field, LXXVII, 1891, p. 858, fig.
Bubalis cokei Sclat. & Thos., Book Antel., I, 1894–1900, p. 27, pl. III.
COKE'S HARTEBEEST. *Kongoni* in Swahili.
1. Adult ♂ P. Kilimanjaro District, East Africa. F. J. Jackson.

97. Bubalis caama (G. Cuvier).
Antilope dorcas Thunb., Mém. Acad. St. Pétersb., III, 1811, p. 316. (nec Pallas.)
Antilope caama G. Cuv., Dict. Scien. Nat., II, 1816, p. 242.
Cerophorus caama Blainv., Bull. Soc. Philom. Paris, 1816, p. 75.
Damalis caama H. Smith, Griff. Anim. Kingd. IV, 1827, p. 348.
Acronotus caama A. Smith, S. Afr. Quart. Journ., II, 1834, p. 221.
Bubalus caama A. Smith, Ill. Zoöl. S. Afr., 1840, pl. XXX.
Bubalis caama Sundev., K. Sven. Vet.-Akad. Handl. Stockh., 1844, p. 208. Sclat. & Thos., Book Antel., I, 1894–1900, p. 33, pl. IV.

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CAPE HARTEBEEST. *Khama* of Bechuanas; *Ingama*, Makalaka; *Inhluzele*, Zulu.

1. Adult ♂ P. South Africa. E. Gerrard & Sons.

98. Bubalis jacksoni Thomas.

Antilope caama Schweinf., Herz. v. Afr., I, 1873, p. 212. (nec G. Cuv.)

Acronotus caama Heugl., Reis. N. O.-Afr., II, 1877, p. 123, pl. (nec G. Cuv.)

Bubalis jacksoni Thos., Ann. Mag. Nat. Hist., 6th Ser., IX, 1892, p. 386. Sclat. & Thos., Book Antel., I, 1894–1900, p. 39.

Alcelaphus jacksoni Lugard, E. Afr., I, 1893, p. 532.

JACKSON'S HARTEBEEST. *Ngazi*, in Uganda; *Alwalwong*, along White Nile.

1. Adult ♀ P. Mau Plateau, Masailand, Brit. E. Africa. F. J. Jackson.

99. Bubalis lichtensteini (Peters).

Antilope lichtensteini Peters, Mitth. Ges. Nat. Fr., 1849. *Id.* Säugeth. Mossamb., I, 1852, p. 190, pls. XLIII, XLIV.

Boselaphus lichtensteini Kirk, Proc. Zoöl. Soc., 1864, p. 660.

Alcelaphus lichtensteini Gray, Cat. Rumin. Mamm. Brit. Mus., 1872, p 44.

Alcelaphus caama Noack, Zool. Jahrb., II, 1887, p. 208.

Bubalis leucoprymnus Matsch., Sitz. Ges. Nat. Freunde Berlin, 1892, p. 137.

Bubalis lichtensteini Sclat. & Thos., Book Antel., I, 1894–1900, p. 45, pl. V.

LICHTENSTEIN'S HARTEBEEST.

1. Adult ♂ P. Hanyani River, Mashonaland, E. Africa. F. C. Selous.
2. Adult ♀ P. Hanyani River, Mashonaland, E. Africa. F. C. Selous.

Genus 54. **Damaliscus.**

Damaliscus Sclat. & Thos., Book Antel., I, Pt. I, 1894, pp. 3, 51–91, figs. 7–12, pls. VI–X. Type *Antilope pygargus* Pallas.

Damalis Gray, Ann. Mag. Nat. Hist., 1st Ser., XVIII, 1846, p. 233. (nec H. Smith, 1827.)

100. Damaliscus lunatus (Burchell).

Antilope lunata Burch., Travels, II, 1824, p. 334.

Damalis lunata H. Smith, Griff. Anim. Kingd., IV, 1827, p. 352. pl.

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Damaliscus lunatus Sclat. & Thos., Book Antel., 1, 1894–1900, p. 85, pl. x.

SASSABY.

1. Adult ♂ P. Hanyani River, Mashonaland, E. Africa. F. C. Selous.
2. Adult ♀ P. Hanyani River, Mashonaland, E. Africa. F. C. Selous.
3. Adult ♂ P. Pungwe River, Portuguese E. Africa. McEwen & Cabot.
4. Adult ♀ P. Pungwe River, Portuguese E. Africa. McEwen & Cabot.

FIG. XII. DAMALISCUS PYGARGUS. BONTEBOK.

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101. Damaliscus pygargus (Pallas).

Antilope dorcas Pall., Miscell. Zool., 1766, p. 6. (nec Linn.)
Antilope pygargus Pall., Spec. Zool., I, 1767, p. 10.
Antilope grisea Bodd., Elench. Anim., 1785, p. 139.
Cemas pygargus Oken, Lehrb. Naturg., III, Pt. 2, 1816, p. 738.
Gazella pygarga Harris, Wild Anim. S. Afr., 1840, pl. XVII.
Damaliscus pygargus Sclat. & Thos., Book Antel., I, 1894–1900, p. 73, pl. VIII.

BONTEBOK.

1. Adult ♂ Pres. Cape Agulhas, S. Africa. J. D. Albertyn.
2. Adult ♀ Pres. Cape Agulhas, S. Africa. J. D. Albertyn.

102. Damaliscus albifrons (Burchell).

Antilope albifrons Burch., Travels, II, 1824, p. 335.
Damalis albifrons Gray, Ann. Mag. Nat. Hist., 1st. Ser., XVIII, 1846, p. 233.
Damaliscus albifrons Sclat. & Thos., Book Antel., I, 1894–1900, p. 79, pl. IX.

BLESSBOK.

1. Adult ♂ Pres. Orange Free State, S. Africa. S. African Museum, Cape Town, S. Africa.

103. Damaliscus jimela (Matschie).

Damalis senegalensis Sclat., Proc. Zoöl. Soc., 1886, p. 176. (nec Childr., nec Heugl.)
Damalis jimela Matsch., Sitzungsb. Ges. Nat. Freund. Berl., 1892, p. 135.
Alcelaphus senegalensis Lugard, E. Afr., I, 1893, p. 532, pl. 2.
Damaliscus jimela Sclat. & Thos., Book Antel., I, 1894–1900, p. 67.

TOPI.

1. Adult ♂ P. British East Africa. Rowland Ward & Co.

Genus 55. **Connochætes.**

Connochaetes Licht., Mag. Ges. Naturf. Freund. Berl., VI, 1814, p. 152. Type *Antilope gnu* Gmelin.
Cemas Oken, Lehrb. Naturg., Zool., III, Pt. II, 1816, p. 727.
Catablepas Gray, Lond. Med. Repos., XV, 1821, p. 307.
Catoblepas H. Smith, Griff. Anim. Kingd., IV, 1827, p. 366.
Gorgon Gray, Knowsl. Menag., 1850, p. 20, pl. XIX, fig. 2.
Butragus Blyth apud Gray, Cat. Rumin. Mamm. Brit. Mus., 1872, p. 43.

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104. Connochætes taurinus (Burchell).

Antilope taurina Burch., Travels, II, 1824, p. 278.

Catoblepas taurinus H. Smith, Griff. Anim. Kingd., IV, 1827, p. 369.

Catoblepas gorgon H. Smith, Griff. Anim. Kingd., IV, 1827, p. 369.

Antilope gorgon Wagn., Schreb. Säugth., Suppl., IV, 1844, p. 474.

Connochætes gorgon Gray, Cat. Ungul. Brit. Mus., 1852, p. 121.

Butragus corniculatus Blyth apud Gray, Cat. Rumin. Mamm. Brit. Mus., 1872, p. 43.

Connochætes taurinus Sclat. & Thos., Book Antel., I, 1894–1900, p. 95, pl. XI.

BRINDLED GNU.

1. Adult ♂ P. East Africa. E. Gerrard & Sons.
2. Adult ♀ P. East Africa. Rowland Ward & Co.
3. Adult ♂ Pres. South Africa. Ringling Bros.

105. Connochætes albojubatus (Thomas).

Connochætes taurinus albojubatus Thos., Ann. Mag. Nat. Hist., 6th Ser., IX, 1892, p. 388.

Connochætes taurina Lugard, E. Afr., I, 1893, p. 540, pl.

FIG. XIII. CONNOCHÆTES GNU. WHITE-TAILED GNU.

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Connochætes albojubatus Sclat. & Thos., Book Antel., I, 1894–1900, p. 105.

WHITE-BEARDED GNU.

1. Adult ♀ P. Kilimanjaro District, E. Africa. F. J. Jackson.

106. Connochætes gnu (Zimmermann).

Bos gnou! Zimm., Spec. Zool. Geogr., 1777, p. 372.
Antilope gnou! Zimm., Geogr. Gesch., II, 1780, p. 102.
Antilope capensis Gatt., Brev. Zool., I, 1780, p 80.
Antilope gnu Gmel., Syst. Nat., I, 1788, p. 189.
Cemas gnu Oken, Lehrb. Naturg., III, Pt. II, 1816, p. 728.
Catoblepas gnu H. Smith, Griff. Anim. Kingd., IV, 1827, p. 367.
Catoblepas operculatus Brookes, Cat. Mus., 1828, p. 64.
Connochætes gnu Sclat. & Thos., Book Antel., I, 1894–1900, p. 111, pl. XII.

WHITE-TAILED GNU.

1. Adult ♂ P. South Africa. Rowland Ward & Co.
2. Adult ♀ P. South Africa. Rowland Ward & Co.
3. Juv. ♀ P. Orange River Colony. E. Gerrard & Sons.

Subfamily II. **Cephalolophinæ.**

Genus 56. **Cephalolophus. Duikers.**

Cephalophus (sic) H. Smith, Griff. Anim. Kingd., V, 1827, p. 344. Type *Antilope silvicultrix* Afzelius.
Cerophorus Blainv., Bull. Soc. Philom. Paris, 1816, p. 74. (Part.)
Sylvicapra Ogilby, Proc. Zoöl. Soc., 1836, p. 138.
Grimmia Laurill., d'Orbig. Dict. Univ. Hist. Nat., I, 1841, p. 623.
Cephalophorus Gray, List Spec. Mamm. Brit. Mus., 1843, p. 162.
Guevei Gray, Cat. Ungul. Brit. Mus., 1852, p. 86.
Terpone Gray, Proc. Zoöl. Soc., 1871, p. 592.
Potamotragus Gray, Cat. Rumin. Mamm. Brit. Mus., 1872, p. 25.

107. Cephalolophus dorsalis Gray.

Cephalophus! dorsalis Gray, Ann. Mag. Nat. Hist., 1st Ser., XVIII, 1846, p. 165. Sclat. & Thos., Book Antel., I, 1894–1900, p. 155, pl. XIX, fig. 2.
Cephalophus! badius Gray, Cat. Ungul. Brit. Mus., 1852, p. 84.
Antilope (*Cephalolophus*) *dorsalis* Wagn., Schreb. Säugth., Suppl., V, 1855, p. 424.
Cephalophus! breviceps Gray, Proc. Zoöl. Soc., 1866, p. 202, pl. XX.

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BAY DUIKER.

1. Adult ♂ P. West Africa. T. W. Franklin.

108. Cephalolophus melanorheus Gray.

Cephalophus! melanorheus Gray, Ann. Mag. Nat. Hist., 1st Ser., XVIII, 1846, p. 167. Sclat. & Thos., Book Antel., I, 1894–1900, p. 185.

Antilope (*Cephalolophus*) *melanorheus* Wagn., Schreb. Säugth., Suppl., V, 1855, p. 428.

Cephalophus! anchietæ Bocage, Proc. Zoöl. Soc., 1878, p. 743.

Cephalophus! maxwelli Noack, Zool. Jahrb.–Abth. f. Syst., IV, 1889, p. 121.

BLACK-RUMPED DUIKER.

1. Adult ♂ Exch. Mayumba, Congo, West Africa. Mus. Hist. Nat. Paris.
2. Adult ♀ Exch. Bangui, Congo, West Africa. Mus. Hist. Nat. Paris.

a. Cephalolophus melanorheus sundevalli (Fitzinger).

Sylvicapra pygmæa var. Sundev., K. Sven. Vet.-Akad. Handl. Stockh., 1845, p. 321.

Cephalophus! pygmæus sundevalli Fitzin., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien, LIX, Pt. I, 1869, p. 166.

Cephalophus! melanorheus sundevalli Sclat. & Thos., Book Antel., I, 1894–1900, p. 185.

SUNDEVALL'S BLACK-RUMPED DUIKER.

1. Adult ♂ P. West Africa. T. H. Franklin.

109. Cephalolophus coronatus Gray.

Antilope grimmia Pall.; Misc. Zool., 1766, p. 12. (nec *Capra grimmia* Linn.)

Cerophorus (*Cervicapra*) *grimmia* Blainv., Bull. Soc. Philom. Paris, 1816, p. 75. (nec. Linn.)

Cephalophus! coronatus Gray, Ann. Mag. Nat. Hist., 1st Ser., X, 1842, p. 266. Sclat. & Thos., Book Antel., I, 1894–1900, p. 195, pl. XXII, fig. 2.

Sylvicapra coronata Sundev., K. Sven. Vet.-Akad. Handl. Stockh., 1846, p. 191.

Grimmia grimmia Jent., Cat. Ost. Leyd. Mus., 1887, p. 138.

CROWNED DUIKER.

1. Adult ♂ P. Kalenque, West Africa, 2,500 feet altitude. E. Gerrard & Sons.

110. Cephalolophus abyssinicus Thomas.

Antilope madoqua Rüpp., Neue Wirbelth. Abyss., Säugeth., 1830, p. 22, pl. VII, fig. 2. (nec H. Smith.)

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Cephalophus! madoqua Gray, Knowsl. Menag., 1850, p. 9. (nec H. Smith.)

Cephalophus! abyssinicus Thos., Proc. Zoöl. Soc., 1892, p. 427. Sclat. & Thos., Book Antel., I, 1894–1900, p. 199, pl. XXII. fig. 1.

ABYSSINIAN DUIKER. *Madoqua*, in Abyssinia; *Midáqua*, in Amharic.

1. Adult ♂ P. 35 miles west of Gondar, Abyssinia. P. H. G. Powell-Cotton.
2. Adult ♀ P. 35 miles west of Gondar, Abyssinia, P. H. G. Powell-Cotton.

111. Cephalolophus grimmia (Linnæus).

Capra grimmia Linn., Syst. Nat., I, 1758, p. 70.

Moschus grimmia Linn., Syst. Nat., I, 1766, p. 92.

Antilope mergens Desm., Nouv. Dict. Hist. Nat., II, 1816, p. 193.

Antilope (*Cephalophus!*) *platous* H. Smith, Griff. Anim. Kingd., IV, 1827, p. 260.

Antilope (*Cephalophus!*) *burchelli* H. Smith, Griff. Anim. Kingd., IV, 1827, p. 262.

Antilope (*Cephalophus!*) *ptoox* H. Smith, Griff. Anim. Kingd., IV, 1827, p. 265.

Cephalophus! mergens A. Smith, S. Afr. Quart. Journ., 1834, p. 215.

Cephalophus! platyotis Less., Hist. Nat. Mamm., Compl. Buff., X, 1836, p. 293.

Cephalophus! campbelliæ Gray, Ann. Mag. Nat. Hist., 1st Ser., XVIII, 1846, p. 164.

Antilope altifrons & *ocularis* Peters, Säugeth. Mozamb., 1852, p. 184, pls. XXXVII, XXXVIII, XXXIX, XLI, fig. 1, XLII, fig. 1.

Grimmia nictitans, *irrorata*, *splendidula*, *burchelli* & *campbelliæ* Gray, Proc. Zoöl. Soc., 1871, pp. 589, 592, fig. 1.

Cephalophus! grimmia flavescens Lorenz, Ann. K.-K. Nat. Hofm. Wien., IX, 1895, p. 60.

Cephalophus! grimmi Sclat. & Thos., Book Antel., I, 1894–1900, p. 203, pl. XXIII.

COMMON DUIKER.

1. Adult ♂ P. Cape Colony, S. Africa. Rowland Ward & Co.

112. Cephalolophus monticola (Thunberg).

Antilope monticola Thunb., Resa, II, 1789, p. 66.

Cephalophus! monticola Sclat. & Thos., Book Antel., I, 1894-1900, p. 191, pl. XXI, fig. 1.

BLUE DUIKER.

1. Adult ♂ P. Zululand, South Africa. Rowland Ward & Co.

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Subfamily III. **Neotraginæ.**

Genus 57. **Oreotragus.**

Oreotragus A. Smith, S. Afr. Quart. Journ., II, 1834, p. 212. Type *Antilope oreotragus* Zimmermann.

Oritragus Glog., Hand–u. Hilfsb. Naturg., I, 1841, p. 154.

113. Oreotragus oreotragus (Zimmermann).

Antilope oreotragus Zimm., Geogr. Gesch., III, 1783, p. 369.

Antilope saltatrix Bodd., Elench. Anim., 1785, p. 141.

Antilope (*Gazella*) *oreotragus* Licht., Mag. Naturf. Freund. Berl., VI, 1814, p. 175.

Cemas oreotragus Oken, Lehrb. Nat., III, Pt. 2, 1816, p. 743.

Antilope (*Ourebia*) *oreotragus* Laurill., Dict. Univ. Hist. Nat., I, 1839, p. 622.

Calotragus saltatrix Temm., Esquis. Zool. Guin., 1853, p. 191.

Antilope klippspringer Desm., Nouv. Dict. Hist. Nat., XII, 1804. p. 390.

Antilope saltatrixoides Wagn., Schreb. Säugth., Suppl., V, 1855, p. 412.

Oreotragus saltator Sclat. & Thos., Book Antel., II, 1896–1897, p. 5, pl. XXV.

KLIPSPRINGER. *Alikut*, in Somali; *Sasa*, in Amharic.

1. Adult ♂ Exch. East Africa. British Museum.
2. Adult ♀ Exch. Sorgoti, Brit. Central Africa. Lord Delamere.

Genus 58. **Ourebia.**

Ourebia Laurill., Dict. Univ. Hist. Nat., I, 1841, p. 622. Type *Antilope ourebi* Zimmermann.

Scopophorus Gray, Ann. Mag. Nat. Hist., 1st Ser., XVIII, 1846, p. 232.

114. Ourebia montana (Cretzschmar).

Antilope montana Cretzschm., Atl. Rüpp. Reise, Säugth., 1826, p. 11, pl. III.

Redunca montana A. Smith, S. Afr. Quart. Journ., II, 1834, p. 211.

Tragelaphus montanus Rüpp., Verz. Senck. Mus., 1842, p. 37.

Calotragus montanus Sundev., K. Sven. Vet.-Akad. Handl. Stockh., 1844, p. 193.

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Scopophorus montanus Gray, Ann. Mag. Nat. Hist., 1st Ser., XVIII, 1846, p. 232.

Nanotragus montanus Brooke, Proc. Zoöl. Soc., 1872, p. 642.

Antilope madoqua Schweinf., Herz. von Afr., I, 1874, p. 266, fig.

Ourebia montana Sclat. & Thos., Book Antel., II, 1896–1897, p. 25.

ABYSSINIAN ORIBI. *Fiego*, in Amharic.

1. Adult ♂ P. 40 miles south of Lake Tana, Abyssinia. E. Gerrard & Sons.
2. Adult ♀ P. 40 miles south of Lake Tana, Abyssinia. E. Gerrard & Sons.

115. Ourebia haggardi (Thomas).

Nanotragus hastatus Jackson, Badmint. Big Game Shooting, I, 1894, p. 285. (nec Peters.)

Neotragus haggardi Thos., Ann. Mag. Nat. Hist., 6th Ser., XV, 1895, p. 187.

Ourebia haggardi Sclat. & Thos., Book Antel., II, 1896–1897, p. 29.

HAGGARD'S ORIBI. *Taya*, in Swahili.

1. Adult ♂ P. Mau Plateau, Masailand, E. Africa. F. J. Jackson.
2. Adult ♀ P. Mau Plateau, Masailand, E. Africa. F. J. Jackson.

Genus 59. **Rhaphiceras.**

Raphicerus! H. Smith, Griff. Anim. Kingd., V, 1827, p. 342. Type *Antilope campestris* Thunberg.

116. *Rhaphiceras campestris (Thunberg).

Capra grimmia Thunb., Resa, II, 1789, p. 8. (nec Linn.)

Antilope campestris Thunb., Mém. Acad. Sci. St. Pétersb., III, 1811, p. 313.

Raphicerus! campestris Sclat. & Thos., Book Antel., II, 1896–97, p. 41, pl. XXVII, fig. 1.

STEINBOK.

1. Adult ♂ P. British East Africa. Rowland Ward & Co.

Genus 60. **Madoqua.**

Madoqua Ogilby, Proc. Zoöl. Soc., 1837, p. 137. Type *Cerophorus saltiana* Blainville.

* Species not yet represented in the collection. Specimen ordered from London.

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Neotragus H. Smith, Griff. Cuv., Anim. Kingd., IV, 1827, p. 269; V, p. 349. Sundev., K. Sven. Vet.-Akad. Handl. Stockh., 1846, p. 191.

117. Madoqua saltiana (Blainville).

Cerophorus (*Cervicapra*) *saltiana* Blainv., Bull. Soc. Philom. Paris, 1816, p. 75.

Antilope saltiana Desm., Nouv. Dict. Hist. Nat., II, 1816, p. 192.

Antilope hemprichiana Ehr., Hempr. & Ehrenb. Symb. Physc., 1833, text to pl. VII.

Neotragus saltiana Jard., Nat. Libr., Mamm., III, Pt. I, 1835, p. 229, pl. XXXIII.

Madoqua saltiana Ogilby, Proc. Zoöl. Soc., 1837, p. 137. Sclat. & Thos., Book Antel., II, 1896–1897, p. 69, pl. XXX.

Calotragus saltianus Temm., Esquiss. Zool., 1853, p. 192.

SALT'S DIK-DIK. *Beni Israel* at Massowa.

1. Adult ♂ P. Eastern Abyssinia. T. H. Franklin.

118. Madoqua swaynii Thomas.

Neotragus saltianus Swayne, Proc. Zoöl. Soc., 1892, p. 307. (nec Blainv.)

Madoqua swaynei Thos., Proc. Zoöl. Soc., 1894, p. 328. Elliot, Pub. Field Columb. Mus., I, 1897, p. 113. Zoöl. Ser. Sclat. & Thos., Book Antel., II, 1896–1897, p. 73.

SWAYNE'S DIK-DIK. *Guyu*, *Sakáro*, in Somali.

1–2. Adult ♂ Coll. Betteran, Somaliland, Brit. E. Africa. D. G. Elliot.

3–4. Adult ♂ Coll. Deregodleh, Somaliland, Brit. E. Africa. D. G. Elliot.

5–6. Adult ♂ Coll. Laferug, Somaliland, Brit. E. Africa. D. G. Elliot.

7. Adult ♀ Coll. Toyo Plain, Somaliland, Brit. E. Africa. D. G. Elliot.

8. Juv. ♀ Coll. Toyo Plain, Somaliland, Brit. E. Africa. D. G. Elliot.

9. Juv. ♀ Coll. Bodeleh, Somaliland, Brit. E. Africa. D. G. Elliot.

119. Madoqua phillipsi Thomas.

Neotragus saltianus Blyth, Jour. Asiat. Soc. Beng., XXIV, p. 297. (nec Blainv.)

Madoqua phillipsi Thos., Proc. Zoöl. Soc., 1894, p. 327. Elliot, Pub. Field Columb. Mus., I, 1897, p. 115. Zoöl. Ser. Sclat. & Thos., Book Antel.. II, 1896–1897, p. 75, pl. XXXI, fig. 2.

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PHILLIPS'S DIK-DIK. *Gol-Ass*, *Sakaro*, in Somali.

1. Adult ♀ Coll. Adadleh, Somaliland, Brit. E. Africa. D. G. Elliot.
2. Adult ♂ Coll. Anouf Prairie, Somaliland, Brit. E. Africa. D. G. Elliot.
3. Adult ♂ Coll. Marodijeh, Somaliland, Brit. E. Africa. D. G. Elliot.
4. Adult ♂ Coll. Bodeleh, Somaliland, Brit. E. Africa. D. G. Elliot.

5–6. Adult ♀ Coll. Bodeleh, Somaliland, Brit. E. Africa. D. G. Elliot.

7. Juv. ♀ Coll. Bodeleh, Somaliland, Brit. E. Africa. D. G. Elliot.
8. Adult ♂ Coll. Dagahbur Ogaden, East Africa. D. G. Elliot.
9. Adult ♀ Coll. Dagahbur Ogaden, East Africa. D. G. Elliot.

120. Madoqua damarensis (Günther).

Neotragus damarensis Günth., Proc. Zoöl. Soc., 1880, p. 20, fig.

Cephalophus hemprichianus Jent., Notes Leyd. Mus., IX, 1887, p. 172.

Madoqua damarensis Sclat. & Thos., Book Antel., II, 1896–1897, p. 79.

DAMARAN DIK-DIK.

1. Adult ♂ P. Angola, Africa. G. L. Bates.
2. Adult ♀ P. Angola, Africa. G. L. Bates.

121. Madoqua kirki (Günther).

Neotragus kirkii Günth., Proc. Zoöl. Soc., 1880, p. 17.

Neotragus damarensis True, Proc. U. S. Nat. Mus., XV, 1892, p. 477, pl. LXXX. (nec Günth.)

Madoqua kirki Thos., Proc. Zoöl. Soc., 1894, p. 328. Sclat. & Thos., Book Antel., II, 1896–1897, p. 83.

KIRK'S DIK-DIK.

1. Adult ♂ P. Kilimanjaro District, East Africa. F. J. Jackson.
2. Adult ♀ P. Kilimanjaro District, East Africa. F. J. Jackson.

122. Madoqua guntheri Thomas.

Neotragus kirkii Sclat., Proc. Zoöl. Soc., 1886, p. 504. (nec Günth.)

Madoqua guntheri Thos., Proc. Zoöl. Soc., 1894, p. 324. Elliot, Pub. Field Columb. Mus., I, 1897, p. 117. Zoöl. Ser. Sclat. & Thos., Book Antel., II, 1896–1897, p. 89, pl. XXXI, fig. 1.

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GÜNTHER'S DIK-DIK. *Sakkaro*, *Gussuli*, in Ogaden.

1. Adult ♂ Coll. Dagahbur, Ogaden, E. Africa. D. G. Elliot.

123. *Madoqua cavendishi Thomas.

Madoqua cavendishi Thos., Proc. Zoöl. Soc., 1898, p. 278.

CAVENDISH'S DIK-DIK.

1. Adult ♀ P. British East Africa. Rowland Ward & Co.

Subfamily IV. **Cervicaprinæ.**

Genus 61. **Cobus.**

Kobus! A. SMITH, Ill. Zoöl. S. Afr., 1840, pl. XXVIII. Type *Antilope ellipsiprymnus* Ogilby.

Kolus! Gray, List Spec. Mamm. Brit. Mus., 1843, p. 159.

Adenota Gray, List Osteöl. Spec. Brit. Mus., 1847, p. 146.

Heleotragus Kirk, Proc. Zoöl. Soc., 1864, p. 657.

Hydrotragus Fitzin., Sitzungsb. Math.-Nat. C. K. Akad. Wiss. Wien, LIX, Pt. 1, 1866, p. 175.

Onotragus Gray, Cat. Rumin. Mamm. Brit. Mus., 1872, p. 17.

124. Cobus ellipsiprymnus (Ogilby).

Antilope ellipsiprymnus Ogilby, Proc. Zoöl. Soc., 1833, p. 47.

Aigocerus ellipsiprymnus Harris, Wild Anim. S. Afr., 1840, p. 71, pl. XIV.

Kobus! ellipsiprymnus A. Smith, Ill. Zoöl. S. Afr., Mamm., 1840, pls. XXVIII, XXIX.

Heleotragus ellipsiprymnus Kirk, Proc. Zoöl. Soc., 1864, p. 658.

Cobus ellipsiprymnus Sclat. & Thos., Book Antel., II, 1896–1897, p. 97, pl. XXXII.

COMMON WATERBUCK. *Balango*, in Somali, *Kuro*, in Swahili.

1. Adult ♂ P. Hanyani River, Mashonaland, E. Africa. F. C. Selous.
2. Adult ♀ P. Hanyani River, Mashonaland, E. Africa. F. C. Selous.
3. Adult ♀ P. Pungwe River, Portuguese E. Africa. McEwen & Cabot.

125. Cobus unctuosus (Laurillard).

Antilope unctuosa Laurill., Dict. Univ. Hist. Nat., I, 1817, p. 622.

Cervus sing-sing Bennett, Rep. Counc. Zoöl. Soc., 1832, p. 5. (nomen nudum.)

Antilope koba Ogilby, Penny Encycl., I, 1834, p. 79. (nec Erxleben.)

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*Not yet in collection, specimen ordered from London.

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Kobus! sing-sing Gray, Ann. Mag. Nat. Hist., 1st Ser., XVIII, 1846, p. 232.

Antilope defassa var. *senegalensis* Wagn., Schreb. Säugth., Suppl., V, 1855, p. 435.

Cobus defassa Sclat., Proc. Zoöl. Soc., 1892, p. 471.

Cobus unctuosus Sclat., Proc. Zoöl. Soc., 1893, p. 727. Sclat. & Thos., Book Antel., II, 1896–1897, p. 105, pls. XXXIII, XXXIII.

THE SING-SING.

1. Adult ♂ P. West Africa. Rowland Ward & Co.

FIG. XIV. COBUS MARIA. MRS. GRAY'S WATERBUCK.

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126. Cobus penricii Rothschild.

Cobus penricei Rothsch., Novitat. Zool., II, 1895, p. 32, pl. IV, fig. 1. Sclat. & Thos., Book Antel., II, 1896–1897, p. 113, pl. XXXV.

PENRICE'S WATERBUCK. *Kring-hart*, in Benguela.

1. Adult ♂ P. Chipungo River, Angola, W. Africa. G. W. Penrice.
2. Adult ♀ P. Chipungo River, Angola, W. Africa. G. W. Penrice.

127. Cobus maria Gray.

Kobus! maria Gray, Ann. Mag. Nat. Hist., 3rd Ser., IV, 1859, p. 296.

Kobus! megaceros! Marno, Reis. im Geb. d. blauen u. weissen Nil, 1874, p. 387.

Cobus maria Sclat. & Thos., Book Antel., II, 1896–1897, p. 121, pl. XXXVII.

MRS. GRAY'S WATERBUCK.

1. Adult ♂ P. White Nile, Africa. E. Gerrard & Sons.

128. Cobus vardoni (Livingstone).

Antilope vardoni Livingst., Miss. Travels, 1857, p. 256, pl. p. 71.

Heleotragus vardonii Kirk, Proc. Zoöl. Soc., 1864, p. 657.

Cobus vardoni Selous, Proc. Zoöl. Soc., 1881, p. 759, pl. LXV. Sclat. & Thos., Book Antel., II, 1896–1897, p. 141, pl. XLI.

Eleotragus vardoni Huet, Bull. Soc. Acclim., 1887, p. 48.

Adenota vardoni Matschie, Säugeth. Deutsch. Ost-Afr., 1895, p. 126.

THE POKU.

1. Adult ♂ P. Lake Mweru, Brit. Centr. Africa. Rowland Ward & Co.
2. Adult ♀ P. Barotseland, Rhodesia, Brit. E. Africa. R. T. Coryndon.

129. Cobus leucotis (Lichtenstein & Peters).

Antilope leucotis Licht. & Peters, Monatsb. K. Preuss. Akad. Wiss. Berlin, 1853, p. 164.

Cobus leucotis Sclat. & Thos., Book Antel., II, 1896–1897, p. 127, pl. XXXVIII.

WHITE-EARED KOB.

1. Adult ♂ P. White Nile, Central Africa. Rowland Ward & Co.

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Genus 62. **Cervicapra.**

Cervicapra Sparrm., K. Sven. Vet.-Akad. Handl. Stockh., I, 1780, p. 275. Type *Antilope cervicapra* Linnæus.
Redunca H. Smith, Griff. Anim. Kingd., V, 1827, p. 337.
Nagor Laurill., Dict. Univ. Hist. Nat., I, 1839, p. 621.
Eleotragus Gray, List Spec. Mamm. Brit. Mus., 1843, p. 165.

130. Cervicapra arundinum (Boddaert).
Antilope arundinum Bodd., Elench. Anim., 1785, p. 141.
Antilope eleotragus Schreb., Säugth., IV, 1792, pl. CCLXVI. (1787.)
Antilope cærulescens Link, Beitr. Naturg., II, 1795, p. 99.
Antilope oreotragus Bechst., Syst. Uebers. vierf. Thier., I, 1799, p. 80. (nec Schreb.)
Antilope arundinacea Bechst., in Penn. Allgem. Uebers. vierf. Thier., I, 1799, p. 81.
Antilope cinerea Bechst., in Penn. Allgem. Uebers. vierf. Thier., II, 1800, p. 643.
Antilope isabellina Afzel., N. Act. Ups., VII, 1815, p. 250.
Cerophorus (*Cervicapra*) *eleotragus* Blainv., Bull. Soc. Philom. Paris, 1816, p. 75.
Antilope oleotragus Desmoul., Dict. Class. Hist. Nat., I, 1822, p. 446.
Redunca eleotragus A. Smith, S. Afr. Quart. Journ., II, 1834, p. 210.
Eleotragus eleotragus Jent., Notes Leyd. Mus., IX, 1887, p. 172.
Cervicapra arundinum Flow. & Lydek., Mamm. Liv. & Ext., 1891, p. 340. Sclat. & Thos., Book Antel., II, 1896–1897, p. 157, pl. XLIII.

REEDBUCK.
1. Adult ♂ P. Pungwe River, Portuguese E. Africa. McEwen & Cabot.
2. Adult ♀ P. Beira District, Portuguese E. Africa. R. H. Ferress Stranack.

131. Cervicapra bohor (Rüppell).
Antilope redunca Rüpp., Neue Wirbelth. Abyss., 1835, p. 20, pl. VII, fig. 1. (nec Pall.)
Redunca bohor Rüpp., Verz. Senck. Mus., 1842, p. 38.
Antilope bohor Wagn., Schreb. Säugth., Suppl., IV, 1844, p. 425.
Cervicapra bohor Sundev., K. Sven. Vet.-Akad. Handl. Stockh., 1844, p. 195. Sclat. & Thos., Book Antel., II, 1896–1897, p. 165.
Eleotragus bohor Temm., Esquiss. Zool., 1853, p 191.

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Eleotragus reduncus Heugl., Ant. u. Büff. N. O.-Afr., Nou. Act. Leop., XXX, Pt. 2, 1863, p. 11.

Antilope arundinacea Schweinf., Herz. von Afrika, II, 1874, p. 465.

BOHOR.

1. Adult ♂ P. Abyssinia. P. H. G. Powell-Cotton.
2. Adult ♀ P. Abyssinia. P. H. G. Powell-Cotton.

a. Cervicapra redunca wardi Thomas.

Cervicapra redunca wardi Thos., Ann. Mag. Nat. Hist., 7th Ser., VI, 1900, p. 303.

WARD'S REEDBUCK.

1. Adult ♂ P. Mau Plateau, Masailand, Brit. E. Africa. F. J. Jackson.
2. Adult ♀ P. Mau Plateau, Masailand, Brit. E. Africa. F. J. Jackson.

132. Cervicapra chanleri Rothschild.

Cervicapra chanleri Rothsch., Novitat. Zool., II, 1895, p. 53. Sclat. & Thos., Book Antel., II, 1896–1897, p. 183.

CHANLER'S REEDBUCK.

1. Adult ♀ P. The Ravine, Uganda, East Africa. F. J. Jackson..

Genus 63. **Antilope.**

Antilope Pall., Misc. Zool., 1766, p. 1, pls. I, IV, fig. 3. Type———?

133. Antilope cervicapra (Linnæus).

Capra cervicapra Linn., Syst. Nat., I, 1758, p. 69.

Antilope cervicapra Pall., Misc. Zool., 1766, p. 9. Sclat. & Thos., Book Antel., III, 1897-1898, p. 5, pl. XLVII.

Antilope rupicapra Müll., Natur. Syst., Suppl., 1776, p. 56.

Cemas strepsiceros Oken, Lehrb. Nat., 1816, p. 732.

Cervicapra bezoartica Gray, List Spec. Mamm. Brit. Mus., 1843, p. 159.

BLACK-BUCK.

1. Juv. ♂ P. India. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 64. **Æpyceras.**

Æpyceros! Sundev., K. Sven. Vet.-Akad. Handl. Stockh., 1845, p. 271. Type *Antilope melampus* Lichtenstein.

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134. Æpyceras melampus (Lichtenstein).

Antilope melampus Licht., Reisen, II, 1812, p. 544, pl. IV.

Æpyceros! melampus Sundev., K. Sven. Vet.-Akad. Handl. Stockh., 1845, p. 271. Sclat. & Thos., Book Antel., III, 1897–1898, p. 17, pl. XLVIII.

Strepsiceros suara Matsch., Sitzungsb. Ges. Natur. Freund., 1892, p. 135.

Æpyceros! melampus johnstoni Thos., Proc. Zoöl. Soc., 1892, p. 553.

Æpyceros! melampus holubi Lorenz., Ann. Mus. Wien, IX, 1894, p. 62. Notizen.

PALLAH.

1. Adult ♂ P. Kilimanjaro District, E. Africa. F. J. Jackson.

135. Æpyceras petersi Bocage.

Æpyceros! petersi Bocage, Proc. Zoöl. Soc., 1878, p. 741. Sclat. & Thos., Book Antel., III, 1897–1898, p. 25, fig. (head & horns.)

Æpyceros! melampus Jent., Notes Leyd. Mus., IX, 1887, p. 173. (nec Lichtenstein.)

ANGOLAN PALLAH.

1. Adult ♂ P. Angola, Portuguese W. Africa. E. Gerrard & Sons.
2. Adult ♀ P. Angola, Portuguese W. Africa. E. Gerrard & Sons.

Genus 65. **Saiga.**

Saiga Gray, List Spec. Mamm. Brit. Mus., 1843, p. XXVI. Type *Capra tatarica* Linnæus.

Colus Wagn., Schreb. Säugth., Suppl., IV, 1844, p. 419.

136. Saiga tatarica Linnæus.

Capra tatarica Linn., Syst. Nat., I, 1766, p. 97.

Antilope saiga Pall., Misc. Zool., 1766, p. 6.

Capra sayga Forst., Phil. Trans., LVII, 1767, p. 344.

Antilope scythica Pall., Spicil. Zool., 1767, p. 9.

Cemas colus Oken, Lehrb. Naturg., 1816, p. 730.

Saiga tatarica Gray, List Spec. Mamm. Brit. Mus., 1843, p. 160. Sclat. & Thos., Book Antel., III, 1897–1898, p. 31, pl. XLIX.

THE SAIGA.

1. Adult ♂ P. Turkmenen Steppe, Asia. J. Friesser.
2. Adult ♀ P. Turkmenen Steppe, Asia. J. Friesser.
3. Juv. ♀ P. Turkmenen Steppe, Asia. J. Friesser.

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FIG. XV. SAIGA TATARICA. SAIGA ANTELOPE.

Genus 66. **Pantholops.**

Pantholops Hodgs., Proc. Zoöl. Soc., 1834, p. 81. Type *Antilope hodgsonii* Abel.

Kemas Gray, List Spec. Mamm. Brit. Mus., 1843, p. 157. (nec Ogilby, 1837.)

137. Pantholops hodgsoni (Abel).

Antilope hodgsonii Abel, Calc. Govern. Gazette, *cf.* Phil. Mag., LXVIII, 1826, p. 234.

Antilope chiru Less., Man. Mamm., 1827, p. 371.

Pantholops hodgsoni Hodgs., Proc. Zoöl. Soc., 1834, p. 80. Sclat. & Thos., Book Antel., III, 1897–1898, p. 45, pl. L.

Kemas hodgsoni Gray, List Spec. Mamm. Brit. Mus., 1843, p. 157.

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THE CHIRU.

1. Adult ♂ P. Pebuk, Western Tibet, 17,500 feet elevation. P. H. G. Powell-Cotton.

FIG XVI. PANTHOLOPS HODGSONI. THE CHIRU.

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Genus 67. **Antidorcas.**

Antidorcas Sundev., K. Sven. Vet.-Akad. Handl. Stockh., 1847, p. 271. Type *Antilope marsupialis* Zimmermann.

138. Antidorcas * marsupialis (Zimmermann).

Antilope marsupialis Zimm., Geogr. Gesch., II, 1780, p. 427.
Antilope euchore "Forst." Zimm., Geogr. Gesch., III, 1783, p. 269.
Antilope saccata Bodd., Elench. Anim., 1785, p. 142.
Capra pygargus Thunb., Resa, II, 1789, p. 28.
Antilope saltans Kerr, Anim. Kingd., 1792, p. 312.
Antilope saltatrix Link, Beitr. Naturg., 1795, p. 79. (nec Bodd.)
Antilope saliens Desm., Nouv. Dict. Hist. Nat., XXIV, 1804, p. 33, tabl.
Cerophorus (*Gazella*) *euchore* Blainv., Bull. Soc. Philom. Paris, 1816, p. 75.
Gazella euchore A. Smith, S. Afr. Quart. Journ., II, 1834, p. 191.
Antidorcas euchore Sclat. & Thos., Book Antel., III, 1897–1898, p. 55, pl. LI.

SPRINGBOK.

1. Adult ♂ P. Coroque River, Angola, W. Africa. J. W. Penrice.
2. Adult ♀ P. Angola, West Africa. Rowland Ward & Co.

Genus 68. **Gacella.**

Gacella Frisch, Das Nat.-Syst. Vierf. Thiere, in Tabellen, 2, Tab. Gen., 1775. Type ————?

Gazella Licht., Mag. Gesell. Naturf. Freund., Berlin, VI, 1814, pp. 152, 171.
Dorcas Gray, Lond. Med. Repos., XV, 1821, p. 307.
Dama Bennett, Trans. Zoöl. Soc., I, 1833, p. 7. Gray, Glean. Menag. & Aviary Knowsley Hall, 1850, p. 27, tab. XXIII, fig. 1.
Leptoceros Wagn., Schreb. Säugth., Suppl., IV, 1844, p. 422.
Procapra Hodgs., Journ. Asiat. Soc. Beng., XV, 1846, p. 334.
Tragops Hodgs., Journ. Asiat. Soc. Beng., XVI, 1847, p. 695.
Tragopsis Fitzin., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien, LIX, 1869, p. 157.

**Marsupialis* was published by Zimmermann three years before he named the Springbok *euchore*, and unless the law of priority is of no effect, this animal must bear the name first given — *marsupialis*. If the said law can be ignored with impunity at the will of a writer, nomenclature will soon become chaotic.

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Eudorcas Fitzin., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien, LIX, 1869, p. 159.
Korin Gray, Cat. Rumin. Mamm. Brit. Mus., 1872, p. 39.
Nanger Lataste, Act. Soc. Linn. Bord., XXXIX, 1885, p. 173.

139. Gacella picticaudata (Hodgson).
Procapra picticaudata Hodgs., Journ. Asiat. Soc. Beng., XV, 1846, p. 334, pl. II; XVI, 1847, p. 696.
Antilope picticaudata Wagn., Schreb. Säugth., Suppl., V, 1855, p. 408.
Gazella picticaudata Sclat. & Thos., Book Antel., III, 1897–1898, p. 71, pl. LII.

TIBETAN GAZELLE.
1. Adult ♂ P. Kalosh, Cashmir. P. H. G. Powell-Cotton.

a. Gacella subgutturosa yarkandensis Blanford.
Gazella subgutturosa yarkandensis Blanf., Second Yark. Miss., Mamm., 1879, p. 88, pl. 15. Sclat. & Thos., Book Antel., III, 1897–1898, p. 93 text.

TURKESTAN GAZELLE.
1. Adult ♂ Exch. near Lob Nor, E. Turkestan. Mus. Hist. Nat. Paris. Barthalot & Prince Henri d'Orleans.
2. Adult ♀ Exch. near Lob Nor, E. Turkestan. Mus. Hist. Nat. Paris. Barthalot & Prince Henri d'Orleans.
3. Adult — P. Yarkand, Asia. Rowland Ward & Co. R. Gordon Cotton.

140. Gacella dorcas (Linnæus).
Capra dorcas Linn., Syst. Nat., I, 1758, p. 69.
Antilope gazella Pall., Misc. Zool., 1766, p. 7.
Antilope kevella Pall., Misc. Zool., 1766, p. 7.
Antilope corinna Pall., Misc. Zool., 1766, p. 7.
Antilope dorcas Pall., Spic. Zool., I, 1767, p. 11.
Cemas dorcas Oken, Lehrb. Nat., III, Pt. 2, 1816, p. 737.
Cerophorus (*Gazella*) *kevella* Blainv., Bull. Soc. Philom. Paris, 1816, p. 75.
Dorcas dorcas Gray, Lond. Med. Repos., XV, 1821, p. 307.
Gazella dorcas Ogilby, Proc. Zoöl. Soc., 1836, p. 137. Sclat. & Thos., Book Antel., III, 1897–1898, p. 99, pl. LVII.
Gazella dorcas sundevalli Fitzin., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien, LIX, Pt. I, 1869, p. 159.

DORCAS GAZELLE.
1. Adult ♂ P. North Africa. T. W. Franklin.
2. Adult ♀ P. North Africa. T. W. Franklin.

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141. Gacella bennetti (Sykes).

Antilope bennettii Sykes, Proc. Zoöl. Soc., 1831, p. 104.
Antilope arabica Elliot, Madr. Journ., x, 1839, p. 223.
Gazella christii Blyth, Journ. Asiat. Soc. Beng., xi, 1842, p. 452.
Gazella bennetti Gray, List Spec. Mamm. Brit. Mus., 1843, p. 161. Sclat. & Thos., Book Antel., iii, 1897–1898, p. 119, pl. lx.
Tragops bennettii Hodgs., Journ. Asiat. Soc. Beng., 1847, pp. ii, xvi, 695.
Gazella hazenna Temm., Esquiss. Zool., 1853, p. 193.
Gazella fuscifrons Blanf., Proc. Zoöl. Soc., 1873, p. 317, fig.

Indian Gazelle.

1. Adult ♂ P. India. Ward's Nat. Scien. Establ., Rochester, N. Y.

142. Gacella spekii Blyth.

Gazella cuvieri Blyth, Rep. Zool. Coll. Somali, 1860, p. 8. (nec Ogilby.)
Gazella spekei Blyth, Cat. Mamm. Mus. Asiat. Soc. Beng., 1863, p. 172. Elliot, Pub. Field Columb. Mus., i, 1897, p. 120. Zoöl. Ser. Sclat. & Thos., Book Antel., iii, 1897–1898, p. **125, pl. lxi.**
Gazella naso Sclat., Proc. Zoöl. Soc., 1886, p. 504, pl. li.

Speke's Gazelle.

1. Adult ♂ Coll. Laferug, Somaliland, E. Africa. D. G. Elliot.
2. Adult ♀ Coll. Laferug, Somaliland, E. Africa. D. G. Elliot.
3. Adult ♂ Coll. Bodeleh, Somaliland, E. Africa. D. G. Elliot.
4. Adult ♀ Coll. Bodeleh, Somaliland, E. Africa. D. G. Elliot.
5. Juv. ♀ Coll. Bodeleh, Somaliland, E. Africa. D. G. Elliot.
6. Adult ♀ Coll. Le Gud, Somaliland, E. Africa. D. G. Elliot.

143. Gacella pelzelni Kohl.

Gazella spekei Sclat., Proc. Zoöl. Soc., 1884, p. 540. (nec Blyth.)
Gazella pelzelni Kohl., Sitzungsb. K. Zool.-Bot. Gesch. Wien, 1886, p. 4. Elliot, Pub. Field Columb. Mus., i, 1897, p. 119. Zoöl. Ser. Sclat. & Thos., Book Antel., iii, 1897–1898, p. 133, pl. lxii.

Pelzeln's Gazelle.

1–3. Adult ♂ Coll. Durban, Somaliland, E. Africa. D. G. Elliot.
4–7. Adult ♀ Coll. Durban, Somaliland, E. Africa. D. G. Elliot.
8. Juv. ♀ Coll. Durban, Somaliland, E. Africa. D. G. Elliot.
9. Adult ♂ Coll. Deregodleh, Somaliland, E. Africa. D. G. Elliot.
10. Adult ♀ Coll. Deregodleh, Somaliland, E. Africa. D. G. Elliot.

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11. Adult ♀ Coll. Hullieh, Somaliland, E. Africa. D. G. Elliot.
12. Adult ♂ P. Somaliland, E. Africa. E. Gerrard & Sons.
13. Adult ♀ P. Somaliland, E. Africa. E. Gerrard & Sons.

144. Gacella thomsoni Günther.

Gazella thomsoni Günth., Ann. Mag. Nat. Hist., 5th Ser., XIV, 1884, p. 427, fig. Sclat. & Thos., Book Antel., III, 1897–1898, p. 171, pl. LXVII.

THOMSON'S GAZELLE.

1. Adult ♂ P. Lake Naivasha, Brit. E. Africa. F. J. Jackson.

145. Gacella granti Brooke.

Antilope sæmmerringii? Speke, Proc. Zoöl. Soc., 1863, p. 3. (nec Cretzsch.)

Gazella granti Brooke, Proc. Zoöl. Soc., 1872, p. 601, pl. XLI. Sclat. & Tnos., Book Antel., III, 1897–1898, p. 179, pl. LXIX.

GRANT'S GAZELLE.

1. Adult ♂ P. Kilimanjaro District, Brit. E. Africa. F. J. Jackson.
2. Adult ♀ Exch. Lake Rudolph, E. Africa. E. Dodson.

146. Gacella soemmerringi (Cretzschmar).

Antilope soemmerringii Cretzsch., Atl. Rüpp. Reise, 1826, p. 49, p. XIX.

Gazella soemmerringi Jard., Nat. Libr., VII, 1842, p. 215, pl. XXVIII. Elliot, Pub. Field Columb. Mus., I, 1897, p. 122. Zoöl. Ser. Sclat. & Thos., Book Antel., III, 1897–1898, p. 195, pl. LXX.

Antilope soemmerringi berberana Matsch., Sitzungsb. Ges. Natur. Freund. Berl., 1893, p. 65.

SOEMMERRING'S GAZELLE.

1–2. Adult ♂ Coll. Durban, Somaliland, E. Africa. D. G. Elliot.
3. Adult ♂ Coll. Toyo Plain, Haud, Somaliland, E. Africa. D. G. Elliot.
4. Adult ♂ Coll. South of Toyo Plain, Haud, Somaliland, E. Africa. D. G. Elliot.
5–6. Adult ♂ Coll. Hersi Barri, Ogaden, E. Africa. D. G. Elliot.
7–9. Adult ♀ Coll. Hersi Barri, Ogaden, E. Africa. D. G. Elliot.
10–14. Adult ♂ Coll. Silo Plain, Haud, Somaliland, E. Africa. D. G. Elliot.
15. Juv. ♂ Coll. Silo Plain, Haud, Somaliland, E. Africa. D. G. Elliot.

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16–19. Adult ♀ Coll. Silo Plain, Haud, Somaliland, E. Africa. D. G. Elliot.

Genus 69. **Ammodorcas.**

Ammodorcas Thos., Proc. Zoöl. Soc., 1891, p. 207. Type *Cervicapra clarkei* Thomas.

147. Ammodorcas clarkii (Thomas).

Cervicapra clarkei Thos., Ann. Mag. Nat. Hist., 6th Ser., VII, 1891, p. 304.

Ammodorcas clarkei Thos., Proc. Zoöl. Soc., 1891, p. 207, pls. XXI,

FIG. XVII. AMMODORCAS CLARKII. DIBATAG.

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XXII. Elliot, Pub. Field Columb. Mus., I, 1897, p. 124. Zoöl. Ser. Sclat. & Thos., Book Antel., III, 1897–1898, p. 219, pl. LXXIII.

DIBATAG.

1–2. Adult ♂ Coll. South of Toyo Plain, Haud, Somaliland, E. Africa. D. G. Elliot.

3. Juv. ♂ Coll. South of Toyo Plain, Haud, Somaliland, E. Africa. D. G Elliot.

4–5. Adult ♀ Coll. South of Toyo Plain, Haud, Somaliland, E. Africa. D. G. Elliot.

6. Juv. ♀ Coll. South of Toyo Plain, Haud, Somaliland, E. Africa. D. G. Elliot.

Genus 70. **Lithocranius.**

Litocranius! Kohl, Ann. Mus. Wien, I, 1886, p. 79. Type *Gazella walleri* Brooke.

148. Lithocranius walleri (Brooke).

Gazella walleri Brooke, Proc. Zoöl. Soc., 1878, p. 929, pl. LVI.

Litocranius! (*Gazella*) *walleri* Kohl, Ann. Mus. Wien, I, 1886, p. 79, pl. V, fig. 3, pl. VI, fig. 1.

Lithocranius walleri Thos., Proc. Zoöl. Soc., 1891, p. 207. Elliot. Pub. Field Columb. Mus., I, 1897, p. 126. Zoöl. Ser. Sclat. & Thos., Book Antel., III, 1897–1898, p. 229, pl. LXXIV.

* *Lithocranius sclateri* Neumann, Sitzungsb. Ges. Naturf. Freund. Berl., 1899, p. 19. Sclat. & Thos., Book Antel., IV, 1899–1900, p. 228.

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* Neumann (l. c.) has separated the Somali Gerenuk from those of other parts of East Africa on account, as he states, of its less red color, lack of black knee tufts, and larger horns. These do not seem to be characters of specific value, for in quite a large number of Gerenuk obtained by myself in Somaliland and Ogaden, there was found to be a great variation in the depth of the red coloring, especially on the back (some individuals being very dark and others comparatively light), while the horns were of all lengths and weights even among adult males. I should therefore regard depth of color and size of horns more the results of individual variation than as indicating any degree of a distinct rank. All of my Somali specimens, even the very young animals, had black at the knee, so this character? of Mr. Neumann is evidently found on all Gerenuk. In my paper on Somali mammals I mention a difference observed in the Gerenuk from the north and south sides of Toyo Plain, in the presence or absence, and its extent when present, of the conspicuous white stripe from the eyes to end of nose. But after comparing many specimens from various localities, the conclusion was apparently inevitable that there was only one species, and

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GERENUK.

1. Adult ♂ Coll. Mandera, Somaliland, E. Africa. D. G. Elliot.
2. Adult ♀ Coll. Laferug, Somaliland, E. Africa. D. G. Elliot.
3. Adult ♂ Coll. South of Toyo Plain, Haud, Somaliland, E. Africa. D. G. Elliot.
4. Adult ♀ Coll. South of Toyo Plain, Haud, Somaliland, E. Africa. D. G. Elliot.

5–7. Juv. ♂ Coll. South of Toyo Plain, Haud, Somaliland, E. Africa. D. G. Elliot.

8. Juv. ♀ Coll. South of Toyo Plain, Haud, Somaliland, E. Africa. D. G. Elliot.

9–11. Adult ♂ Coll. Hullieh, Somaliland, E. Africa. D. G. Elliot.

12–14. Adult ♀ Coll. Hullieh, Somaliland, E. Africa. D. G. Elliot.

15. Adult ♂ Coll. Bodeleh, Somaliland, E. Africa. D. G. Elliot.
16. Juv. ♀ Coll. Haud, Somaliland, E. Africa. D. G. Elliot.

Genus 71. **Dorcotragus.**

Dorcotragus Noack, Zool. Anz., XVII, 1894, p. 202. Type *Oreotragus megalotis* Menges.

149. Dorcotragus megalotis (Menges).

Oreotragus megalotis Menges, Zool. Anz., XVII, 1894, p. 131.

Dorcotragus megalotis Noack, Zool. Anz., XVII, 1894, p. 202. Elliot, Pub. Field Columb. Mus., I, 1897, p. 135. Zoöl. Ser. Sclat. & Thos., Book Antel., III, 1897–1898, p. 241, pl. LXXV.

BEIRA.

1. Adult ♀ Coll. Nasr Hablod, near Hargeisa, Somaliland, E. Africa. D. G. Elliot.
2. Juv. ♀ Coll. Nasr Hablod, near Hargeisa, Somaliland, E. Africa. D. G. Elliot.

that it was subject to much individual variation in the depth of body coloring and also in the absence or presence to a changeable extent of facial stripes. With the experience thus gained in the field of the appearance of this antelope, I fail to find in Mr. Neumann's description any characters sufficient, in my opinion, to warrant a specific, or even subspecific, rank to *L. sclateri*, and have therefore included the name in the synonyms given above.

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Subfamily V. *Addaxinæ.

Genus 72. Ozanna.

Ozanna Reichenb., Vollst. Naturg. In-und Ausl., Säugeth., III, 1845, p. 126, Taf. XXXIX, XL. Type *Antilope niger* Harris.
Egocerus (sic) Desm., Mamm., II, 1822, p. 475. (nec *Ægocerus!* Pall.)
Aigocerus! H. Smith, Griff. Anim. Kingd., V, 1827, p. 324.
Hippotragus Sundev., K. Sven. Vet.-Akad. Handl. Stockh., 1846, p. 196.
Ozanna Brehm, Thierl., III, 1880, p. 227. Syn.

150. Ozanna equina (Desmarest).
Antilope equina Desm., Nouv. Dict. Hist. Nat., XXIV, 1804, p. 4, Tabl. p. 32.
Capra æthiopica Schinz, Cuv. Thierr., I, 1821, p. 403.
Capra jubata Goldf., Schreb. Säugth., V, 1824, pl. 287c.
Antilope barbata H. Smith, Griff. Anim. Kingd., IV, 1827, p. 180; V, p. 325.
Antilope aurita H. Smith, Griff. Anim. Kingd., V, 1827, p. 325.
Antilope truteri Fisch., Syn. Mamm., 1829, p. 478.
Aegoceros! leucophæus Gray, List Spec. Mamm. Brit. Mus., 1843, p. 158. (nec Pall.)
Hippotragus leucophæus Brehm, Thierl., III, 1880, p. 226.
Hippotragus equinus Sclat. & Thos., Book Antel., IV, 1899–1900, p. 13, pls. LXXVII, LXXVIII.

ROAN ANTELOPE.

1. Adult ♂ P. Hanyani River, Mashonaland, E. Africa. F. C. Selous.
2. Adult ♀ P. Hanyani River, Mashonaland, E. Africa. F. C. Selous.
3–4. Adult ♂ P. Pungwe River, Portuguese E. Africa. McEwen & Cabot.
5. Adult ♀ P. Pungwe River, Portuguese E. Africa. McEwen & Cabot.

151. Ozanna nigra (Harris).
Aigocerus! niger Harris, Proc. Zoöl. Soc., 1838, p. 2.
Antilope nigra Gerv., Dict. Scien. Nat., Suppl., I, 1840, p. 265.
Hippotragus niger Sundev., K. Sven. Vet.-Akad. Handl. Stockh.,

*Addax having priority over the other genera, gives the name to the subfamily.

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1846, p. 197. Sclat. & Thos., Book Antel., IV, 1899–1900, p. 31, pls. LXXIX, LXXX.

Ægoceros! niger var. *kirki* Gray, Cat. Rumin. Mamm. Brit. Mus., 1872, p. 35.

Ozanna nigra Brehm, Thierl., III, 1880, p. 227.

SABLE ANTELOPE.

1. Adult ♂ P. Hanyani River, Mashonaland, E. Africa. F. C. Selous.
2. Adult ♀ P. Hanyani River, Mashonaland, E. Africa. F. C. Selous.

Genus 73. **Oryx.**

Oryx Blainv., Bull. Soc. Philom. Paris, 1816, p. 75. Type *Capra gazella* (Linnæus).

152. Oryx algazel (Oken).

Antilope algazel Oken, Lehrb. Naturg., III, Pt. 2, 1816, p. 741.

Oryx leucoryx Auct. (nec. Pallas.)

SCIMITAR ORYX.

1. Adult ♂ P. W. Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

153. Oryx gazella (Linnæus).

Capra gazella Linn., Syst. Nat., I, 1758, p. 69.

Antilope bezoartica Pall., Misc. Zool., 1766, p. 8. (nec Linn.)

Antilope recticornis Erxl., Syst. Regn. Anim., 1777, p. 272.

Antilope oryx Pall., Spic. Zool., fasc. XII, 1777, pp. 16, 61.

Antilope pasan Daud., Lacép. Buff., XIV, 1799, p. 182.

Oryx capensis Ogilby, Proc. Zoöl. Soc., 1836, p. 139.

Oryx gazella Gray, List Spec. Mamm. Brit. Mus., 1843, p. 156. Sclat. & Thos., Book Antel., IV, 1899–1900, p. 57, pl. LXXXIII.

Oryx oryx Jent., Cat. Ost. Leyd. Mus., IX, 1887, p. 135.

GEMSBOK.

1. Adult ♀ P. Coroque River, Angola, West Africa. J. W. Penrice.

154. Oryx beisa (Rüppell).

Antilope beisa Rüpp., Neue Wirbelth. Abyss., 1835, p. 14, pl. V.

Oryx beisa Sundev., K. Sven. Vet.-Akad. Handl. Stockh., 1844, p. 207. Elliot, Pub. Field Columb. Mus., I, 1897, p. 130. Zoöl. Ser. Sclat. & Thos., Book Antel., IV, 1899–1900, p. 65, pl. LXXXIV.

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THE BEISA.

1. Adult ♂ Coll. Hullieh, near Hargeisa, Somaliland, E. Africa. D. G. Elliot.
2. Adult ♀ Coll. Hullieh, near Hargeisa, Somaliland, E. Africa. D. G. Elliot.
3–4. Juv. ♂ Coll. South of Toyo Plain, Haud, Somaliland, E. Africa. D. G. Elliot.
5. Adult ♀ Coll. South of Toyo Plain, Haud, Somaliland, E. Africa. D. G. Elliot.
6. Adult ♂ Coll. Bodeleh, Somaliland, E. Africa. D. G. Elliot.
7. Adult ♀ Coll. Silo Plain, Haud, Somaliland, E. Africa. D. G. Elliot.
8. Adult ♂ Coll. Haud, Somaliland, E. Africa. D. G. Elliot.
9. Juv. ♂ Coll. Haud, Somaliland, E. Africa. D. G. Elliot.
10. Adult ♀ Coll. Hersi Barri, Ogaden, E. Africa. D. G. Elliot.

Subfamily VI. **Tragelaphinæ.**

Genus 74. **Boselaphus.**

Boselaphus Blainv., Bull. Soc. Philom. Paris, 1816, p. 75. Type *Antilope tragocamelus* Pallas.

Portax H. Smith, Griff. Anim. Kingd., v, 1827, p. 366.

Tragelaphus Ogilby, Proc. Zoöl. Soc., 1837, p. 138. (nec Blainville.)

155. Boselaphus tragocamelus (Pallas).

Antilope tragocamelus Pall., Misc. Zool., 1766, p. 5.

Antilope picta Pall., Spic. Zool., XII, 1777, p. 14.

Antilope albipes Erxl., Syst. Regn. Anim., 1777, p. 280.

Antilope leucopus Zimm., Spec. Zool. Geogr., 1777, p. 541.

Boselaphus albipes Desm., Nouv. Dict. Hist. Nat., II, 1816, p. 199, pl. XXXIII, fig. 2.

Portax tragelaphus Sundev., K. Sven. Vet.-Akad. Handl. Stockh., LXV, 1846, p. 198.

Boselaphus tragocamelus Sclat. & Thos., Book Antel., IV, 1899–1900, p. 93, pl. LXXXVII.

INDIAN ANTELOPE. NILGAI.

1. Juv. ♂ P. North India. Ward's Nat. Scien. Establ., Rochester, N. Y.

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Genus 75. **Tragelaphus.**

Tragelaphus Blainv., Bull. Soc. Philom. Paris, 1816, p. 75. Type *Antilope sylvatica* Sparrman.

156. Tragelaphus sylvaticus (Sparrman).

Antilope sylvatica Sparrm., Act. Holm, 1780, p. 197, pl. VII.

Tragelaphus sylvaticus Blainv., Bull. Soc. Philom. Paris, 1816, p. 75. Sclat. & Thos., Book Antel., IV, 1899–1900, p. 117, pl. XC, fig. 2.

Tragelaphus scriptus sylvaticus Thos., Proc. Zoöl. Soc., 1891, p. 389.

CAPE BUSHBUCK.

1. Adult ♂ P. Mau Plateau (The Ravine), Masailand, E. Africa. F. J. Jackson.
2. Adult ♀ P. Mau Plateau (The Ravine), Masailand, E. Africa. F. J. Jackson.
3. Juv. ♂ P. Mau Plateau (The Ravine), Masailand, E. Africa. F. J. Jackson.
4. Juv. ♀ P. Mau Plateau (The Ravine), Masailand, E. Africa. F. J. Jackson.

a. Tragelaphus roualeyni fasciatus (Pocock).

Tragelaphus decula Swayne, Proc. Zoöl. Soc., 1894, p. 317. (nec Rüpp.)

Tragelaphus scriptus fasciatus Pocock, Ann. Mag. Nat. Hist., 7th Ser., V, 1900, p. 95.

Tragelaphus roualeyni fasciatus Sclat. & Thos., Book Antel., IV, 1899–1900, pp. 123, 128, pl. XC, fig. 1.

CUMMING'S STRIPED BUSHBUCK.

1. Adult ♂ P. Mashonaland, E. Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 76. **Boöcercus.**

Boocercus Thomas, Ann. Mag. Nat. Hist., 7th Ser., X, 1902, p. 309. Type *Boocercus eurycerus isaaci* Thomas.

Euryceros! Gray, Glean. Menag. Aviary Knowsl. Hall., 1850, p. 27, tab. XXIII, fig. 1. *Id.* Cat. Rumin. Mamm. Brit. Mus., 1872, p. 47. (nec *Eurycerus* Illiger, 1807, Coleopt.)

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a. **Boöcercus eurycerus isaaci* Thomas.
Boocercus eurycerus isaaci Thos., Ann. Mag. Nat. Hist., 7th Ser., x, 1902, p. 309. *Id.* Proc. Zoöl. Soc., 1902, p. 319.

FIG. XVIII. BOÖCERCUS EURYCERUS. BONGO.

ISAAC'S BONGO.
1. Adult ♂ P. British East Africa. Rowland Ward & Co.

Genus 77. **Limnotragus.**

Limnotragus Sclat. & Thos., Book Antel., IV, 1899–1900, p. 149.
Type *Tragelaphus spekii* Sclater.
Hydrotragus Gray, Cat. Rumin. Mamm. Brit. Mus., 1872, p. 49. (nec Fitzin., 1869.)

* Species not yet represented in the collection; specimen ordered from London.

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157. Limnotragus gratus (Sclater).

Tragelaphus spekii Peters, Monatsb. K. Preuss. Akad. Wiss. Berlin, 1876, p. 484. (nec Sclat.)

Tragelaphus gratus Sclat., Proc. Zoöl. Soc., 1880, p. 452, pl. XLIV.

Limnotragus gratus Sclat. & Thos., Book Antel., IV, 1899–1900, p. 165, pl. XCV.

FIG. XIX. LIMNOTRAGUS GRATUS. CONGAN SITATUNGA.

CONGAN SITATUNGA.

1. Adult ♂ P. Gaboon, West Africa. E. Gerrard & Sons.

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Genus 78. **Strepsiceros.**

Strepsiceros Frisch, Das Nat.-Syst. vierf. Thiere, in Tabellen, Tab. Gen., 1775. Rafin., Anal. Nat., 1815, p. 56. H. Smith, Griff. Anim. Kingd., v, 1827, p. 365. Type *Antilope strepsiceros* Pallas.

Calliope Ogilby, Proc. Zoöl. Soc., 1837, p. 138.

158. Strepsiceros strepsiceros (Pallas).

Antilope strepsiceros Pall., Misc. Zool., 1766, p. 9.

Antilope tendal Cretzschm., Atl. Rüpp. Reise, Säugeth., 1820, p. 22.

Antilope chora Fisch., Syn. Mamm., 1829, p. 475.

Strepsiceros strepsiceros Smuts, En. Mamm. Cap., 1832, p. 92.

Strepsiceros capensis A. Smith., S Afr. Quart. Journ., II, 1834, p. 223. Sclat. & Thos., Book Antel., IV, 1899–1900, p. 173, pl. XCVI.

Calliope strepsiceros Ogilby, Proc. Zoöl. Soc., 1836, p. 138.

Strepsiceros kudu Gray, List Spec. Mamm. Brit. Mus., 1843, p. 155. Elliot, Pub. Field Columb. Mus., I, 1897, p. 132. Zoöl. Ser.

Strepsiceros strepsiceros zambesiensis Lorenz, Ann. Mus. Wien, IX, 1894, Notiz., p. 62.

GREATER KUDU.

1. Adult ♂ Coll. Jerato Pass, Golis Mountains, Somaliland, E. Africa. D. G. Elliot.
2. Adult ♂ Coll. Hullieh, near Hargeisa, Somaliland, E .Africa. D. G. Elliot.
3. Juv. ♂ Coll. Hullieh, near Hargeisa, Somaliland, E. Africa. D. G. Elliot.
4. Adult ♀ Coll. Hullieh, near Hargeisa, Somaliland, E. Africa. D. G. Elliot.

159. Strepsiceros imberbis Blyth.

Strepsiceros kudu var. Gray, Proc. Zoöl. Soc., 1850, p. 143.

Strepsiceros imberbis Blyth, Proc. Zoöl. Soc., 1869, p. 55. Elliot, Pub. Field Columb. Mus., I, 1897, p. 134. Zoöl. Ser. Sclat. & Thos., Book Antel., IV, 1899–1900, p. 185, pl. XCVII.

Strepsiceros tendal Gray, Hand-L. Edent. Thick-s. & Rumin. Mamm. Brit. Mus., 1873, p. 118. (nec Fischer.)

LESSER KUDU.

1. Juv. ♂ Coll. Leferug, Somaliland, E. Africa. D. G. Elliot.

2–3. Adult ♂ Coll. Mandera, Somaliland, E. Africa. D. G. Elliot.

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FIG. XX. STREPSICEROS STREPSICEROS. GREATER KUDU.

4–7. Adult ♀ Coll. Mandera, Somaliland, E. Africa. D. G. Elliot.
8–9. Adult ♀ Coll. Hullieh, Somaliland, E. Africa. D. G. Elliot.

Genus 79. **Taurotragus.**

Taurotragus Wagn., Schreb. Säugth., Suppl., v, 1855, p. 439. Type *Antilope oryx* Pallas.

Oreas Desm., Mamm., II, 1822, p. 471. (nec Hübner, 1806, Lepidopt.)

Doratoceros! Lydek., Lond. Field, LXXVIII, 1891, p. 130.

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a. Taurotragus oryx livingstonii (Sclater).
Oreas livingstonii Sclat., Proc. Zoöl. Soc., 1864, p. 105.
Taurotragus oreas livingstonii Sclat., Proc. Zoöl. Soc., 1893, p. 507.
Oreas canna livingstoni Jacks., Big Game Shoot., 1894, p. 285.
Taurotragus oryx livingstonii Sclat. & Thos., Book Antel., IV, 1899–1900, p. 197, pl. XCIX.

LIVINGSTONE'S ELAND.

1. Adult ♀ P. Mashonaland, E. Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

Subfamily VII. **Rupicaprinæ.**

Genus 80. **Rupicapra.**

Rupicapra Frisch, Das Nat.-Syst. vierf. Thiere, in Tabellen, II, Tab. Gen., 1775. Blainv., Bull. Soc. Philom. Paris., 1816, p. 75. Type *Capra rupicapra* Linnæus.
Capella Keyserl. & Blas., Wirbelth. Europ., 1840, pp. IV, 9, 28.
Aplocerus (sic) H. Smith, Griff. Anim. Kingd., V, 1827, p. 354.

160. Rupicapra rupicapra (Linnæus).
Capra rupicapra Linn., Syst. Nat., I, 1758, p. 68.
Rupicapra tragus Gray, List Spec. Mamm. Brit. Mus., 1843, p. 167. *Id.* Cat. Ungul. Brit. Mus., 1852, pl. XIV, figs. 2, 3, 4. *Id.* Cat. Rumin. Mamm. Brit. Mus., 1872, p. 41.

CHAMOIS.

1. Adult ♂ P. Switzerland. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 81. **Nemorhædus.**

Næmorhedus! H. Smith, Griff. Anim. Kingd., V, 1827, p. 352. Type *Antilope sumatrensis* Shaw.
Kemas! Ogilby, Proc. Zoöl. Soc., 1837, p. 138.
Hemitragus Van der Hoeven, Handb. Dierk., 2d ed., II, 1855, p. 943. (nec Hodgson.)
Urotragus Gray, Ann. Mag. Nat. Hist., 4th Ser., VIII, 1871, p. 371.

161. Nemorhædus bubalinus (Hodgson).
Antilope bubalina Hodgs., Proc. Zoöl. Soc., 1832, p. 12.
Antilope thar Hodgs., Glean. Scien., III, 1832, p. 324.
Nemorhædus proclivus vel *thar* Hodgs., Jour. Asiat. Soc. Beng., X, 1841, p. 913.

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Capricornis bubalina Gray, Proc. Zoöl. Soc., 1850, p. 135.
SEROW.
1. Adult ♂ P. Sivalik Hills, Northern India. J. W. Penrice.

162. Nemorhædus milne-edwardsi (David).
Capricornis milne-edwardsii David, Archiv. Mus. Paris, v, 1869, p. 10.
MILNE-EDWARDS'S MOUNTAIN GOAT.
1. Adult ♂ Exch. Ta-tsien-lou, Tibet. Mus. Hist. Nat. Paris. A. David.

163. Nemorhædus griseus (A. Milne-Edwards).
Nemorhedus! griseus A. Milne-Edw., Nouv. Archiv. Mus. Paris, VII, 1871, p. 93.
GRAY MOUNTAIN GOAT.
1. Adult ♂ Exch. Tibet. Mus. Hist. Nat. Paris.

164. Nemorhædus cinereus (A. Milne-Edwards).
Antilope (Nemorhedus!) cinerea A. Milne-Edw., Recherch. Mamm., 1874, p. 362, pls. 70, 71, figs. 1, 71A.
ASH-COLORED MOUNTAIN GOAT.
1. Adult ♀ Exch. Ta-tsien-Pon, China. Mus. Hist. Nat. Paris. R. P. Dejean.

165. Nemorhædus goral (Hardwicke).
Antilope goral Hardw., Trans. Linn. Soc. Lond., XIV, 1825, p. 518, pl. XIV.
Kemas! goral Ogilby, Proc. Zoöl. Soc., 1836, p. 138.
Nemorhedus! goral Horsf., Cat. Mamm. E. Ind. Mus., 1851, p. 168.
GORAL.
1. Adult ♂ P. Tibet. Rowland Ward & Co.

Genus 82. **Capra.**

Capra Linn., Syst. Nat., I, 1758, p. 68. Type *Capra hircus* Linnæus.
Ibex Frisch, Das Nat.-Syst. vierf. Thiere, in Tabellen, I, Tab. Gen., 1775. Hodgs., Journ. Asiat. Soc. Beng., XVI, 1847, p. 700.
Hircus Bodd., Elench. Anim., 1785, p. 147.
Aegoceros! Pall., Zoogr. Rosso-Asiat., I, 1811, p. 224. (nec H. Smith.)

166. Capra ibex Linnæus.
Capra ibex Linn., Syst. Nat., I, 1758, p. 68.
Aegoceros! ibex Pall., Zoogr. Rosso-Asiat., I, 1811, p. 224.

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Ibex alpinus Gray, List Osteol. Brit. Mus., 1847, p. 59.
Ibex europæa Hodg., Journ. Asiat. Soc. Beng., XVI, 1847, p. 700.

ALPINE IBEX.

1. Adult ♂ P. Switzerland. Ward's Nat. Scien. Establ., Rochester. N. Y.

167. Capra nubiana F. Cuvier.

Capra nubiana F. Cuv., Hist. Nat. Mamm., fasc. VII, 1825, pl. 397.
Capra sinaitica Hemp. & Ehrenb., Symb. Phys., Zool., I, 1828, pl. XVIII.
Capra arabica Rüpp., Neue Wirbelth. Abyssin., 1835, p. 17.
Ægoceros! beden Wagn., Schreb. Säugth., Suppl., V, 1855, p. 1303.
Capra mengesi Noack, Zool. Anz., 1896, p. 353.

ARABIAN IBEX.

1. Adult ♂ P. North Africa. J. F. G. Umlauff.

168. Capra hircus Linnæus.

Capra hircus Linn., Syst. Nat., I, 1758, p. 68.
Aegoceros! hircus Pall., Zoogr. Rosso-Asiat., I, 1811, p. 227.
Hircus ægagrus Gray, Cat. Ungul. Brit. Mus., 1852, p. 152. (nec Gmel.)

DOMESTIC GOAT.

1. Adult ♂ P. Angola, Africa. Deyrolle Fils.
2. Adult ♂ P. Congo, Africa. Deyrolle Fils.

169. Capra ægagrus Gmelin.

Antilope gazella Gmel., Syst. Nat., I, 1788, p. 190. (nec Linn.)
Capra ægagrus Gmel., Syst. Nat., I, 1788, p. 193.
Aegoceros! ægagrus Pall., Zoogr. Rosso-Asiat., I, 1811, p. 266.
Capra caucasica Gray, List Spec. Mamm. Brit. Mus., 1843, p. 167.
Ægoceros! pictus Erhardt, Faun. Cyclad., 1858, p. 29.
Hircus gazella Gray, Cat. Rumin. Mamm. Brit. Mus., 1872, p. 53.

PASANG.

1. Adult ♂ P. Elbruz Mountains, Persia. J. Friesser.

170. Capra cylindricornis (Blyth).

Ovis cylindricornis Blyth, Proc. Zoöl. Soc., 1840, p. 68.
Capra caucasica Keyserl. & Blas., Wirbelth. Europ., 1840, p. 28.
Ægoceros! pallasi Rouill., Bull. Soc. Mosc., XIV, 1841, p. 908, pl. XI.
Capra cylindricornis Büchn., Mém. Acad. St. Pétersb., XXXV, No. 8, 1887 p. 21.

EAST CAUCASIAN TUR.

1. Adult ♂ P. Central Caucasian Mountains. Rowland Ward & Co.

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FIG. XXI. CAPRA CYLINDRICORNIS. EAST CAUCASIAN TUR.

171. Capra falconeri (Wagner).

Ægoceros! (*Capra*) *falconeri* Wagn., Münch. gelehrt. Anz., IX, 1839, p. 430.

Ægoceros! falconeri Wagn., Schreb. Säugth., Suppl., IV, 1844, p. 499.

Hircus megaceros! Adams, Proc. Zoöl. Soc., 1858, p. 525.

Hircus falconeri Gray, Cat. Rumin. Mamm. Brit. Mus., 1872, p. 53.

Capra falconeri Blanf., Faun. Brit. Ind., Mamm., 1888–91, p. 505, figs. 164, 165.

MARKHOR.

1. Adult ♂ P. Lufar, Kashmir. P. H. G. Powell-Cotton.

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Genus 83. **Hemitragus.**

Hemitragus Hodgs., Calc. Jour. Nat. Hist., II, No. VI, 1841, p. 218. Type *Capra quadrimammis* vel *jharal* Hodgson.

172. Hemitragus jemlahicus (H. Smith).

Capra jemlahica (misprinted in text) H. Smith, Griff. Anim. Kingd., IV, 1827, p. 308, pl. V, 1827, p. 358.

Capra jharal Hodg., Asiat. Res., 1833, XVIII, Pt. 2, p. 129, pl.

Capra quadrimammis Hodg., Journ. Asiat. Soc. Beng., IV, 1835, p. 710.

Hemitragus jemlaicus Blanf., Faun. Brit. India, 1888–91, p. 509, fig. 168. Lydekk., Wild Oxen, Sheep & Goats, 1898, p. 296, pl. XXVI.

HIMALAYAN TAHR.

1. Adult ♂ P. Chumba State, N. India. Rowland Ward & Co.

Genus 84. **Oreamnus.**

Oreamnos! Rafin., Amer. Month. Mag., II, 1817, p. 44. Type *Ovis montanus* Ord.

Haploceros! H. Smith, Griff. Anim. Kingd., V, 1827, p. 354.

173. Oreamnus montanus (Ord).

Ovis montanus Ord, Guth. Geog., 2d Amer. ed., II, 1815, p. 292.

Oreamnus montanus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 44, pls. XVII, XVIII, XIX, XX. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 52. Zoöl. Ser.

ROCKY MOUNTAIN GOAT.

1. Adult ♂ P. Montana. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♀ P. Montana. Ward's Nat. Scien. Establ., Rochester, N. Y.
3. Adult ♂ P. Montana. C. E. Akeley.

a. Oreamnus montanus columbianus Allen.

Oreamnos! montanus columbianus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1904, p. 20.

Oreamnus montanus columbianus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 52. Zoöl. Ser.

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COLUMBIAN MOUNTAIN GOAT.

1. Adult ♂ P. Between Bull River & Sheep Creek, British Columbia, Canada. Benj. Van Nostrand.
2. Adult ♀ P. Between Bull River & Sheep Creek, British Columbia, Canada. Benj. Van Nostrand.
3. Juv. — P. Between Bull River & Sheep Creek, British Columbia, Canada. Benj. Van Nostrand.

174. Oreamnus kennedyi Elliot.

Oreamnus kennedyi Elliot, Pub. Field Columb. Mus., III, 1900, p. 3. Zoöl. Ser. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 44, pls. XVII–XX. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 53. Zoöl Ser.

KENNEDY'S MOUNTAIN GOAT.

1–2. Adult ♂ P. Knik, Alaska. C. F. Periolat.
3–4. Adult ♀ P. Knik, Alaska. C. F. Periolat.
5–6. Juv. — P. Knik, Alaska. C. F. Periolat.

Genus 85. **Ovis.**

Ovis Linn., Syst. Nat., I, 1758, p. 70; I, 1766, p. 97. Type *Ovis aries* Linnæus.

175. Ovis nahoor Hodgson.

Ovis nayaur Hodgs., Asiat. Res., XVIII, Pt. 2, 1833, p. 135. (Part.)
Ovis nahoor Hodgs., Proc. Zoöl. Soc., 1834, p. 107.
Ovis burrhel Blyth, Proc. Zoöl. Soc., 1840, p. 67.
Ovis nahura Gray, List Spec. Mamm. Brit. Mus., 1843, p. 170.
Pseudois nahoor Hodgs., Journ. Asiat. Soc. Beng., XV, 1846, p. 343.
Musimon nahoor Gerv., Hist. Nat. Mamm., II, 1855, p. 191.
Pseudois burrhel Prezew, Cat. Zoöl. Coll., 1887, p. 16.

BHARAL; BLUE WILD SHEEP.

1. Adult ♂ P. Nepal, India. Ward's Nat. Scien. Establ., Rochester, N. Y.

176. Ovis lervia (Pallas).

Antilope lervia Pallas, Spicil. Zool., fasc. XII, 1777, p. 12.
Ovis tragelaphus Cuv., Règn. Anim., I, 1817, p. 268.
Ovis ornata I. Geoff., Desc. Egypt. Hist. Nat., II, 1833, p. 742, pl. VII.
Ovis (*Ammotragus*) *tragelaphus* Blyth, Proc. Zoöl. Soc., 1840, pp. 13, 76.

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Musimon tragelaphus Gerv., Hist. Nat. Mamm., 1855, p. 192.
AOUDAD; ARUI.

1. Adult ♂ P. North Africa. J. F. G. Umlauff.

177. Ovis cervina Desmarest.

Ovis cervina Desm., Nouv. Dict. Hist. Nat., 1804, p. 5. Elliot Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 46, pl. XXI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 53. Zoöl. Ser.

Ovis canadensis Shaw, Nat. Misc., 1804? p. 610.
BIG-HORN; ROCKY MOUNTAIN SHEEP.

1. Adult ♂ P. Montana. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult — P. Montana. C. E. Akeley.
3. Adult — P. Montana. C. E. Akeley.

a. Ovis cervina cremnobates Elliot.

Ovis cervina cremnobates Elliot, Pub. Field Columb. Mus., III, 1903, p. 239. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 84, figs. XXVI, XXVII, pls. XXXIV, XXXV. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 54. Zoöl. Ser.
LOWER CALIFORNIA MOUNTAIN SHEEP.

1. Juv. ♂ Paratype. Coll. Mattomi, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
2–12. Adult ♀ Type and paratypes. Coll. Mattomi, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
13. Juv. ♀ Paratype. Coll. Mattomi, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
14–15. Adult ♂ Pres. Lower California, Mexico. Kennedy & Dupee.
16. Juv. ♂ Pres. Lower California, Mexico. Kennedy & Dupee.
17–18. Adult ♀ Pres. Lower California, Mexico. Kennedy & Dupee.

178. Ovis stonii Allen.

Ovis stonei Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 111, pls. II, III. Elliot, Syn. N. Amer. Mamm., F. C. M. Pub., II, 1901, p. 47. Zoöl. Ser.

Ovis stonii Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 54. Zoöl. Ser.
BLACK MOUNTAIN SHEEP.

1–3. Adult ♂ P. Mountains near Stickeen River, 18 miles from Glenora, British Columbia. H. Pidgeon.

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4–6. Adult ♀ P. Mountains near Stickeen River, 18 miles from Glenora, British Columbia. H. Pidgeon.

7. Juv. ♀ P. Mountains near Stickeen River, 18 miles from Glenora, British Columbia. H. Pidgeon.

8. Juv. ♂ P. Mountains near Stickeen River, 18 miles from Glenora, British Columbia. H. Pidgeon.

179. Ovis dalli (Nelson).

Ovis montana dalli Nels., Proc. U. S. Nat. Mus., 1884, p. 12.

Ovis dalli Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 47. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 55. Zoöl. Ser.

FIG. XXII. OVIS AMMON. ARGALI.

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DALL'S MOUNTAIN SHEEP.

1. Adult ♂ Exch. Alaska. U. S. Nat. Museum.

a. Ovis dalli kenaiensis Allen.

Ovis dalli kenaiensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1902, p. 145. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 55. Zoöl. Ser.

KENAI PENINSULA MOUNTAIN SHEEP.

1–2. Adult ♂ Pres. Kenai Peninsula, Alaska. V. S. Kennedy.
3. Adult ♀ Pres. Kenai Peninsula, Alaska. V. S. Kennedy.
4. Juv. ♂ Pres. Kenai Peninsula, Alaska. V. S. Kennedy.
5–6. Juv. — Pres. Kenai Peninsula, Alaska. V. S. Kennedy.

180. Ovis ammon (Linnæus).

Capra ammon Linn., Syst. Nat., I, 1758, p. 70.
Ovis argali Pall., Spicil. Zool., fasc. XI, 1777–80, p. 20.
Ovis ammon Erxl., Syst. Regn. Anim., 1777, p. 250.
Aegoceros! argali Pall., Zoogr. Rosso-Asiat., I, 1811, p. 231.
Caprovis (Argali) argali Gray, Cat. Ungul. Brit. Mus., 1852, p. 174.
Musimon argali Gerv., Hist. Nat. Mamm., II, 1855, p. 191.

ARGALI.

1. Adult ♂ P. Thian-Shan Mountains, Baimgol, China. J. Friesser.

181. Ovis musimon (Pallas).

Aegoceros! musimon Pall., Zoogr. Rosso-Asiat., I, 1811, p. 230.
Ovis musmon! H. Smith, Griff. Anim. Kingd., IV, 1827, p. 322.
Capra musmon! Fisch., Syn. Mamm., 1829, p. 488.
Ovis musimon occidentalis Brandt & Ratzeb., Med. Zoöl., I, 1829, p. 55.

EUROPEAN MUFLON.

1. Adult ♂ P. Corsica. J. F. G. Umlauff.

Genus 86. **Ovibos.**

Ovibos Blainv., Bull. Soc. Philom. Paris, 1816, p. 76. Type *Bos moschatus* Zimmermann.

182. Ovibos moschatus (Zimmermann).

Bos moschatus Zimm., Geogr. Gesch., II, 1780, p. 86.
Ovibos moschatus Blainv., Bull. Soc. Philom. Paris, 1816, p. 76. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 48.

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pl. XXII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 56. Zoöl. Ser.

Ovibos pallantis H. Smith, Griff. Anim. Kingd., IV, 1827, p. 375.

Bos pallasi De Kay, Ann. N. Y. Lyc. Nat. Hist., II, 1828, p. 29. (nec Baer, 1823.)

Bos canaliculatus Fisch., Mém. Acad. Mosc., III, 1834, p. 287.

Bubalus moschatus Owen, Quart. Journ. Geol. Soc., XII, 1856, p. 124.

MUSK-OX.

1. Adult ♂ P. Great Slave Lake, Arctic America. Ward's Nat. Scien. Establ., Rochester, N. Y.

2–3. Adult ♂ P. 160 miles north of Fort Resolution, Great Slave Lake, Arctic America. C. F. Periolat.

4–5. Adult ♀ P. 160 miles north of Fort Resolution, Great Slave Lake, Arctic America. C. F. Periolat.

6. Juv. ♀ P. 160 miles north of Fort Resolution, Great Slave Lake, Arctic America. C. F. Periolat.

a. Ovibos moschatus niphœcus Elliot.

Ovibos moschatus niphœcus Elliot, Proc. Biol. Soc. Wash., XVIII, 1905, p. 135. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 56. Zoöl. Ser.

BLACK MUSK-OX.

1–3. Adult ♂ Type & paratypes. P. 600 miles N. of Hudson Bay, Arctic America. Thos. Luce & Co., New Bedford, Mass.

4. Juv. ♂ Paratype. P. 600 miles N. of Hudson Bay, Arctic America. Thos. Luce & Co., New Bedford, Mass.

5. Adult ♀ Paratype. P. 600 miles N. of Hudson Bay, Arctic America. Thos. Luce & Co., New Bedford, Mass.

6–7. Juv.— Paratypes. P. 600 miles N. of Hudson Bay, Arctic America. Thos. Luce & Co., New Bedford, Mass.

Genus 87. **Bos.**

Bos Linn., Syst. Nat., I, 1758, p. 71. Type *Bos taurus* Linnæus.

183. Bos mindorensis (Steere).

Anoa mindorensis Steere, Proc. Zoöl. Soc., 1888, p. 413.

Probubalus mindorensis Steere, Proc. Zoöl. Soc., 1888, p. 413.

Bubalus mindorensis Heude, Mèm. Hist. Nat. Emp. Chinois, II, 1888, pp. 4, 50.

Bos mindorensis Lydekk., Roy. Nat. Hist., II, 1894, p. 206.

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TAMARAU; MINDORO BUFFALO.

1. Adult ♂ P. Island of Mindoro, Philippines. J. B. Steere.
2. Adult ♀ P. Island of Mindoro, Philippines. J. B. Steere.
3. Juv. ♀ P. Island of Mindoro, Philippines. J. B. Steere.

184. Bos gaurus H. Smith.

Bos gaurus H. Smith, Griff. Anim. Kingd., IV, 1827, p. 399.
Bos gour Hardw., Zoöl. Journ., III, 1828, p. 233.
Bos gayæus Hardw., Zoöl. Journ., III, 1828, p. 233.
Bibos subhemachelus Hodgs., Journ. Asiat. Soc. Beng., VI, 1837, p. 499.
Bibos cavifrons Hodgs., Journ. Asiat. Soc. Beng., VI, 1837, p. 745.
Bibos asseel Horsf., Cat. E. Ind. Mus., 1851, p. 181.
Gavæus gaurus Blyth, Journ. Asiat. Soc. Beng., XXIX, 1860, p. 282.

THE GAUR.

1. Adult ♂ P. S. W. India. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 88. **Bison.**

Bison H. Smith, Griff. Anim. Kingd., V, 1827, p. 373. Type *Bos bison* Linnæus.

185. Bison bison (Linnæus).

Bos bison Linn., Syst. Nat., I, 1758, p. 72.
Bos americanus Gmel., Syst. Nat., I, 1788, p. 204.
Bison americanus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 49, pl. XXIII. Zoöl. Ser.
Bison bison Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, Suppl., p. 486. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 57. Zoöl. Ser.

AMERICAN BISON.

1–2. Adult ♂ Summer coat. P. Nebraska. Ward's Nat. Scien. Establ., Rochester, N. Y.
3. Adult ♀ Summer coat. P. Nebraska. Ward's Nat. Scien. Establ., Rochester, N. Y.
4. Juv. ♂ Summer coat. P. Nebraska. Ward's Nat. Scien. Establ., Rochester, N. Y.
5. Adult ♂ Winter coat. P. Nebraska. Charles Payne.
6. Adult ♀ Exch. Corbyn Herd. Am. Mus. Nat. Hist. N. Y.

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7. Juv. — Exch. Corbyn Herd. Am. Mus. Nat. Hist. N. Y.
8. Adult ♂ P. Corbyn Herd. New Hampshire. W. Hart.
9. Adult ♀ P. Corbyn Herd. New Hampshire. W. Hart.
10–12. Juv. ♀ P. Corbyn Herd. New Hampshire. W. Hart.

SUBORDER II. PERISSODACTYLA.

Family IX. **Tapiridæ. Tapirs.**

Genus 89. **Tapirus.**

Tapirus Briss., Regn. Anim., 1762, p. 81. Type *Tapirus tapirus* Brisson = *Hippopotamus terrestris* Linnæus, ex Brazil.
Tapir Blumenb., Handb. Naturg., I, 1779, p. 129.
Tapyra Liais, Climats, Géol., Faun. et Geogr., Botan. Brés., 1872, p. 397.

186. Tapirus indicus G. Cuvier.
Tapirus indicus G. Cuv., Tabl. Elém. Hist. Nat., 1798, p. 152.
Tapirus malayanus Raffles, Trans. Linn. Soc., XIII, 1822, p. 270.
Tapirus bicolor Wagn., Schreb. Säugth., Suppl., VI, 1835, p. 400.

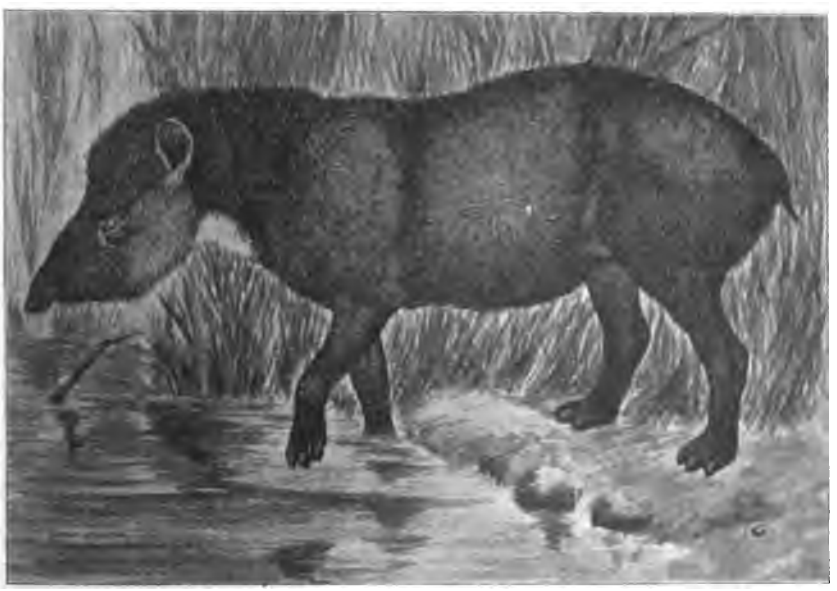

FIG. XXIII. TAPIRELLA DOWI. DOW'S TAPIR.

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MALAY TAPIR.

1. Adult ♂ P. Sumatra. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 90. **Tapirella.**

Tapirella Palmer, Science, N. S., XVII, 1903, p. 873. Type *Elasmognathus bairdii* Gill.

187. Tapirella bairdi (Gill).

Elasmognathus bairdii Gill., Proc. Acad. Nat. Scien. Phil., 1865, p. 183.

Tapirella bairdi Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 87, pls. XXXVI, XXXVII. Zoöl. Ser.

Id. Check-L. Mamm. N. Amer. Cont. &. W. Indies, F. C. M. Pub., VI, 1905, p. 58. Zoöl. Ser.

BAIRD'S TAPIR.

1–2. Juv. Ad. ♂ Coll. Achotal, State of Vera Cruz, Mexico Heller & Barber.

Family X. **Equidæ. Horses.**

Genus 91. **Equus.**

Equus Linn., Syst. Nat., I, 1758, p. 73; I, 1766, p. 100. Type *Equus caballus* Linnæus.

a. Equus burchelli transvaalensis Ewart.

Equus burchelli transvaalensis Ewart, Veterinarian, LXX, 1897, p. 622, fig. 4. W. L. Sclat., Faun. S. Afr., I, 1900, p. 290.

TRANSVAAL ZEBRA.

1. Adult ♂ P. Angola, West Africa. Ward's Nat. Scien. Estab., Rochester, N. Y.

2–5. Adult ♀ P. Laffleburg District, near Middleburg, Transvaal, S. Africa. E. Gerrard & Sons.

6–7. Juv. — P. Laffleburg District, near Middleburg, Transvaal, S. Africa. E. Gerrard & Sons.

b. Equus burchelli selousi Pocock.

Equus chapmani Lorenz, Ann. K. K. Hofm. Wien, IX, Notiz., 1894, p. 64. (nec Layard.)

Equus burchelli selousii Pocock, Ann. Mag. Nat. Hist., 6th Ser., XX, 1897, p. 45. W. L. Sclat., Faun. S. Afr., I, 1900, p. 291.

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FIG. XXIV. EQUUS BURCHELLI. BURCHELL'S ZEBRA.

SELOUS'S ZEBRA.

1. Adult ♂ P. Hanyani River, Mashonaland, S. Africa. F. C. Selous.

c. Equus burchelli crawshayi de Winton.

Equus burchelli crawshayi de Winton, Ann. Mag. Nat. Hist., 6th Ser., XVII, 1896, p. 319. W. L. Sclat., Faun. S. Afr., I, 1900, p. 292.

CRAWSHAY'S ZEBRA.

1. Adult ♂ P. Beira, Portuguese E. Africa. McEwen & Cabot.

188. Equus zebra Linnæus.

Equus zebra Linn., Syst. Nat., I, 1758, p. 74.

Equus montanus Burch., Trav., I, 1822, p. 139.

Asinus zebra Gray, Zoöl. Journ., I, 1825, p. 248.

Hippotigris zebra H. Smith, Jard. Nat. Lib., XII, 1841, p. 324, pl. XXI.

Equus hartmannæ Matsch., Sitzungsb. Gesch. Naturf. Freunde, Berlin, 1898, p. 174.

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MOUNTAIN ZEBRA.

1. Adult ♀ P. South Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

189. Equus grevyi A. Milne-Edwards.

Equus grevyi A. Milne-Edwards, La Nature, x, 1882, p. 12, fig. 1. Pocock, Ann. Mag. Nat. Hist., 6th Ser., xx, 1897, p. 48.

GREVY'S ZEBRA.

1. Adult ♂ P. Lake Rudolph, Africa. A. H. Neuman.
2. Adult ♀ P. Somaliland, E. Africa. E. Gerrard & Sons.

190. Equus hemionus Pallas.

Equus hemionus Pall., Nov. Comm. Acad. Petrop., xix, 1775, p. 394, pl. vii, et Auct.

Asinus equioides Hodgs., Journ. Asiat. Soc. Beng., xi, 1842, p. 287.

Asinus polyodon Hodgs., Calc. Journ. Nat. Hist., vii, 1847, p. 469, pl. vi.

Equus hemippus Is. Geoff., Compte Rend., xli, 1855, p. 1214.

ASIATIC WILD ASS.

1. Adult ♂ P. Tibet. R. Gordon Cotton.

a. Equus asinus somalicus Sclater.

Equus asinus somalicus Sclat., Proc. Zoöl. Soc., 1884, p. 540, pl. l. Elliot, Pub. Field Columb. Mus., i, 1897, p. 139. Zoöl. Ser.

SOMALI WILD ASS. *Gumburi* in Somali.

1. Adult ♂ Coll. Las-dero Durban, Somaliland, E. Africa. D. G. Elliot.
2. Adult ♀ Coll. Las-dero Durban, Somaliland, E. Africa. D. G. Elliot.
3. Adult ♂ Coll. Haili, Somaliland, E. Africa. D. G. Elliot.
4. Juv. ♂ Coll. Laferug, Somaliland, E. Africa. D. G. Elliot.

Family XI. **Rhinocerotidæ. Rhinoceroses.**

Genus 92. **Rhinoceros.**

Rhinoceros Linn., Syst. Nat., i, 1758, p. 56. Type *Rhinoceros unicornis* Linnæus.

Atelodus Pomel, Ann. Soc. Lit. Auvergne, xxvi, 1853, p. 114.

Rhinaster Gray, in Gerr. Cat. Bones Brit. Mus., 1862, p. 282. (nec Wagler, 1830.)

Ceratorhinus Gray, Proc. Zoöl. Soc., 1867, p. 1021.

Ceratotherium Gray, Proc. Zoöl. Soc., 1867, p. 1027.

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Dihoplus Brandt, Mém. Acad. Imp. Scien. St. Pétersb., VIIme Sér., XXVI, 1878, p. 48.

Zalabis Cope, Bull. U. S. Geol. & Geogr. Surv. Terr., V, No. 2, 1879, p. 229.

191. Rhinoceros sumatrensis Cuvier.

Rhinoceros sumatrensis Cuvier, Régn. Anim., 1817, p. 240. Sclat., Proc. Zoöl. Soc., 1872, p. 790. *Id.* Trans. Zoöl. Soc., IX, p. 650, pl. XCVII.

Rhinoceros crossii Gray, Proc. Zoöl. Soc., 1854, p. 250, fig.

Ceratorhinus sumatranus Gray, Cat. Carniv. Pachyderm. & Edent. Mamm. Brit. Mus., 1869, p. 313.

SUMATRAN RHINOCEROS.

1. Adult ♂ P. Sumatra. F. W. Franklin.

FIG. XXV. RHINOCEROS SUMATRENSIS. SUMATRAN RHINOCEROS.

SUBORDER III. HYRACOIDEA.

Family XII. **Procaviidæ.**

Genus 93. **Procavia.**

Procavia Storr, Prodr. Meth. Mamm., 1780, p. 40, tab. B. Type *Cavia capensis* Pallas.

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Hyrax Herm., Tab. Affinit. Anim., 1783, p. 115.
Euhyrax Gray, Ann. Mag. Nat. Hist., 4th Ser., I, 1868, p. 46.
Dendrohyrax Gray, Ann. Mag. Nat. Hist., 4th Ser., I, 1868, p. 48.
Heterohyrax Gray, Ann. Mag. Nat. Hist., 4th Ser., I, 1868, p. 50.

192. Procavia capensis (Pallas).
Cavia capensis Pall., Misc. Zool., 1766, p. 30.
Hyrax semicircularis Gray, Cat. Carniv. Pachyderm. & Edent. Mamm. Brit. Mus., 1869, p. 285.
Procavia capensis Thos., Proc. Zoöl. Soc., 1892, p. 60.
CAPE CONEY.
1. Adult — P. South Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Procavia brucii somalica Thomas.
Procavia brucei somalica Thos., Proc. Zoöl. Soc., 1892, p. 71. Elliot, Pub. Field Columb. Mus., I, 1897, p. 140. Zoöl. Ser.
SOMALI CONEY.
1. Adult ♂ Coll. Adadleh, Somaliland, E. Africa. D. G. Elliot.

SUBORDER IV. PROBOSCIDEA.

Family XIII. **Elephantidæ. Elephants.**

Genus 94. **Elephas.**

Elephas Linn., Syst. Nat., I, 1758, p. 33. Type *Elephas maximus* Linnæus.

193. Elephas maximus Linnæus.
Elephas maximus Linn., Syst. Nat., I, 1758, p. 33, ex Ceylon.
Elephas indicus Cuv., Règn. Anim., I, 1817, p. 231.
Elephas sumatranus Temm., Coup-d'œil Poss. Néerland., II, 1847, p. 91.
INDIAN ELEPHANT.
1. Adult ♂ P. Southern India. W. Hornaday.
2. Juv. ♂ P. Southern India. W. Hornaday.

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Order VI. **Rodentia. Rodents.**

SUBORDER I. SIMPLICIDENTATA

Family I. **Anomaluridæ.**

Subfamily I. **Anomalurinæ.**

Genus 95. **Anomalurus.**

Anomalurus Waterh., Proc. Zoöl. Soc., 1842, p. 124. Type *Anomalurus fraseri* Waterhouse.

194. Anomalurus pelii Temminck.

Anomalurus pelii Temm., Verhand. over de Nat. Geschied der Nederl. Bezitt., I, 1845, p. 108.

PEL'S FLYING SQUIRREL.

1. Adult — P. West Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

195. Anomalurus beecrofti Fraser.

Anomalurus beecrofti Fras., Proc. Zoöl. Soc., 1852, p. 17.

BEECROFT'S FLYING SQUIRREL.

1. Adult ♀ P. Benito River, W. Africa. G. L. Bates.

196. Anomalurus erythronotus A. Milne-Edwards.

Anomalurus erythronotus A. Milne-Edw., Compt. Rend., LXXXIX, 1879, p. 771.

RED-BACKED FLYING SQUIRREL.

1. Adult ♀ P. Benito River, West Africa. G. L. Bates.

Family II. **Sciuridæ. Squirrels, Chipmunks, etc.**

Subfamily I. **Nannosciurinæ.**

Genus 96. **Nannosciurus.**

Nannosciurus Trouess., Le Natural., II, No. 37, 1880, p. 292. Type *Sciurus melanotis* Müller & Schlegel.

197. Nannosciurus whiteheadi Thomas.

Sciurus whiteheadi Thos., Ann. Mag. Nat. Hist., 3rd Ser., XX 1867, p. 127. *Id.* Proc. Zoöl. Soc., 1889, p. 231, pl. XXIV.

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WHITEHEAD'S PIGMY SQUIRREL.

1. Adult -- Topotype. P. Kina Balu, Borneo. E. Gerrard & Sons. A. Everett.

Subfamily II. **Sciurinæ.**

Genus 97. **Protoxerus.**

Protoxerus F.-Major, Proc. Zoöl. Soc., 1893, p. 189, pl. VIII, figs. 7–8. Type *Sciurus stangeri* Waterhouse.

198. Protoxerus stangeri (Waterhouse).

Sciurus stangeri Waterh., Proc. Zoöl. Soc., 1842, p. 127.
Sciurus caniceps Temm., Esquiss. Zool., 1853, p. 127.
Macroxus stangeri Gray, Ann. Mag. Nat. Hist., 3rd Ser., XX, 1867, p.
* *Sciurus nordhoffi* Du Chaillu, Proc. Bost. Soc. Nat. Hist., 1860, p. 363.
Sciurus eborivorus Du Chaillu, Proc. Bost. Soc. Nat. Hist., 1860 p. 363.
Sciurus subalbidus Du Chaillu, Proc. Bost. Soc. Nat. Hist., 1860 p. 365.
Sciurus temminckii Anders., Zoöl. Exped. W. Yunan, 1878, p. 229. (note.)
Heliosciurus stangeri Trouess., Cat. Mamm. Viv. quam Foss., Suppl., 1904, p. 301.

STANGER'S SQUIRREL.

1. Adult ♀ P. Benito River, W. Africa. E. Gerrard & Sons. G. L. Bates.
2. Adult — P. Batuga, Cameroons, W. Africa. C. W. McCleary.

Genus 98.. **Xerus.**

Xerus Hempr. & Ehrenb., Symb. Phys., Mamm., I, 1832, Sig. ee, pl. IX. Type *Sciurus* (*Xerus*) *brachyotus* Hemprich & Ehrenberg.

Geosciurus A. Smith, S. Afric. Quart. Jour., II, No. 2, 1834, p. 128.
Atlantoxerus F.-Major, Proc. Zoöl. Soc., 1893, p. 189, pl. VIII, fig. 9, pl. IX, fig. 9.

*See de Winton, Ann. Mag. Nat. Hist., 7th Ser., II, 1898, pp. 11, 12.

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Subgenus A. **Xerus.**

199. Xerus rutilus (Cretzschmar).

Sciurus rutilus Cretzschm., Rüpp. Atl. Reis. Nordl. Afr., I, 1826, p. 59.

Spermosciurus simplex Less., Hist. Nat. Mamm., V, 1836, p. 402.

Xerus dabagala Heugl., Peterm. Mittheil., 1861, p. 17.

Xerus flavus A. Milne-Edw., Rev. Mag. Zool., 1867, p. 229.

Xerus fuscus Huet, Nouv. Archiv. Mus. Paris, 2me Sér., 1880, pl. VI, fig. 1.

Xerus rutilus Jent., Notes Leyd. Mus., IV, 1882, p. 41. Elliot, Pub. Field Columb. Mus., I, 1897, p. 141. Zoöl. Ser.

RED SPINY SQUIRREL.

1. Adult ♂ Coll. Laferug, Somaliland, E. Africa. D. G. Elliot.
2. Adult ♀ Coll. Laferug, Somaliland, E. Africa. D. G. Elliot.
3–4. Adult ♂ Coll. Hullieh, Somaliland, E. Africa. D. G. Elliot.
5. Adult ♀ Coll. Hullieh, Somaliland, E. Africa. D. G. Elliot.

Genus 99. **Funisciurus.**

Funisciurus Trouess., Le Natural., II, No. 37, 1880, p. 293. Type *Sciurus lemniscatus* Leconte.

200. Funisciurus mystax de Winton.

Funisciurus mystax de Winton, Ann. Mag. Nat. Hist., 7th Ser., II, 1898, p. 9, fig. 3.

MYSTERIOUS SQUIRREL.

1. Adult ♀ P. Benito River, W. Africa. E. Gerrard & Sons. G. L. Bates.

201. Funisciurus pyrrhopus (F. Cuvier).

Sciurus pyrropus! F. Cuv., Hist. Nat. Mamm., 1833, pl. 240.

Sciurus erythrogenys Waterh., Proc. Zoöl. Soc., 1842, p. 129. Fras., Zool. Typica, 1849, p. 25.

**Sciurus leucogenys* Waterh., Ann. Mag. Nat. Hist., 1st Ser., X, 1842, p. 202.

Sciurus rubripes Du Chaillu, Proc. Bost. Soc. Nat. Hist., 1860, p. 366.

Macroxus pyrrhopus Gray, Ann. Mag. Nat. Hist., 3rd Ser., XX, 1867, p. 330. (Part.)

*Said to be a good species. See Thos., Ann. Mag. Nat. Hist., 7th Ser., XI, 1903, p. 81.

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Funambulus poensis Fitzin., Sitzungsb. K. Akad. Wiss. Wien, LVI, 1867, p. 34.

Heliosciurus pyrrhopus Trouess., Cat. Rong. viv et foss., 1881, p. 83.

FERNANDO PO SQUIRREL.

1. Adult ♂ P. Benito River, W. Africa. G. L. Bates.
2. Adult — P. Island of Fernando Po? E. Gerrard & Sons.

202. Funisciurus poensis (A. Smith).

Sciurus poensis A. Smith, S. Afr. Quart. Journ., XI, 1839, p. 64. Huet, Nouv. Archiv. Mus. Paris, 1880, p. 149, pl. VII, fig. 1. Jent., Notes Leyd. Mus., IV, 1882, p. 28.

Sciurus olivaceus A. Milne-Edw., Rev. Zool., 1867, p. 228.

Macroxus poensis Gray, Ann. Mag. Nat. Hist., 3rd Ser., XX, 1867, p. 329.

Funambulus poensis Fitzin., Sitzungsb. K. Akad. Wiss. Wien, LVI, 1867, p. 34. (Part.)

Heliosciurus poensis Trouess., Cat. Rong. viv. et foss., 1881, p. 84.

BENITO RIVER SQUIRREL.

1. Adult ♂ P. Benito River, W. Africa. G. L. Bates.

203. Funisciurus palliatus (Peters).

Sciurus palliatus Peters, Monatsb. Preuss. Akad. Wiss. Berl., 1852, p. 273.

Sciurus ornatus Gray, Proc. Zoöl. Soc., 1864, p. 13, pl. I.

Macroxus annulatus var. *frerei* Gray, Ann. Mag. Nat. Hist., 4th Ser., XII, 1873, p. 265.

Heliosciurus palliatus Trouess., Cat. Rong. viv. et foss., 1881, p. 83.

PROTECTED SQUIRREL.

1. Adult — P. Natal, S. Africa. E. Gerrard & Sons.

a. Funisciurus lemniscatus isabella (Gray).

Sciurus isabella Gray, Proc. Zoöl. Soc., 1862, p. 180.

Sciurus sharpii Gray, Ann. Mag. Nat. Hist., 4th Ser., XII, 1873, p. 265.

ISABELLA SQUIRREL.

1. Adult ♂ P. Cameroons, Africa. E. Gerrard & Sons.

Genus 100. **Funambulus.**

Funambulus Less., Illust. Zool., 1832, pl. 43, text. Type *Funambulus indicus* Lesson=*Sciurus palmarum* Linnæus.

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Rhinosciurus Gray, List Spec. Mamm. Brit. Mus., 1843, pp. xxv, 195.
Laria Gray, Ann. Mag. Nat. Hist., 3rd Ser., xx, 1867, p. 276.
Palmista Gray, Ann. Mag. Nat. Hist., 3rd Ser., xx, 1867, p. 279.
Eoxerus F.-Major, Proc. Zoöl. Soc., 1893, p. 189, pl. viii, figs. 5–6, 11–12, 16–18; pl. ix, figs. 5–6, 11–12, 16–18.

Subgenus A. **Rhinosciurus.**

204. Funambulus laticaudatus (Müller & Schlegel).
Sciurus laticaudatus Müll. & Schleg., Verhandl. over de Natuur. Gesch. etc., Zool., 1839, p. 100, pl. xv, figs. 1–3.
Rhinosciurus tupaioides (sic) Gray, Ann. Mag. Nat. Hist., 3rd. Ser., xx, 1867, p. 286.
Long-nosed Squirrel.
1. Adult — P. Braiung Hill, Lawas District, N. Borneo. E. Gerrard & Sons.

205. Funambulus everetti (Thomas).
Sciurus everetti Thos., Ann. Mag. Nat. Hist., 6th Ser., vi, 1890, p. 171.
Everett's Squirrel.
1. Adult — P. Kina Balu, Borneo. E. Gerrard & Sons. A. Everett.

Subgenus B. **Laria.**

206. Funambulus insignis (F. Cuvier).
Sciurus insignis F. Cuv., Hist. Nat. Mamm., 1821, pl. 233.
Chief Squirrel.
1. Adult ♂ P. Sumatra. E. Gerrard & Sons.

a. Funambulus insignis diversus Thomas.
Funambulus insignis diversus Thos., Ann. Mag. Nat. Hist., 7th Ser., ii, 1898, p. 248.
Thomas's Chief Squirrel.
1. Adult ♂ P. Gunong Mulu, Borneo. E. Gerrard & Sons. A. Everett.

a. Funambulus macclellandi formosanus (Bonhote).
Sciurus macclellandi formosanus Bonh., Ann. Mag. Nat. Hist., 7th Ser., v, 1900, p. 52.
Striped Himalayan Squirrel.
1. Adult — P. Island of Formosa. E. Gerrard & Sons.

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b. Funambulus macclellandi barbii (Blyth).
Sciurus barbei Blyth, Jour. Asiat. Soc. Beng., XVI, 1847, p. 875, pl. XXXVI, fig. 3.
PALE-STRIPED SQUIRREL.
1. Adult ♀ P. Tavoy, British Burma. W. Davison.

Subgenus C. **Palmista.**

207. Funambulus palmarum (Linnæus).
Sciurus palmarum Linn., Syst. Nat., I, 1766, p. 86.
Sciurus penicillatus Leach, Zool. Misc., I, 1814, p. 6, pl. I.
Funambulus indicus Less., Illust. Zool., 1832, pl. XLIII.
Sciurus brodei Blyth, Jour. Asiat. Soc. Beng., XVIII, 1849, p. 602.
Sciurus kelaarti Layd., Blyth, Jour. Asiat. Soc. Beng., XX, 1851, p. 166.
PALM SQUIRREL.
1. Adult — P. Coinbatore, India. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 101. **Ratufa.**

Ratufa Gray, Ann. Mag. Nat. Hist., 3rd Ser., XX, 1867, p. 273. Type *Sciurus indicus* Erxleben.
Rukaia Gray, Ann. Mag. Nat. Hist., 3rd Ser., XX, 1867, p. 275.
Eosciurus Trouess., Le Natural., II, No. 37, 1880, p. 291.

Subgenus A. **Ratufa.**

208. Ratufa indica (Erxleben).
Sciurus indicus Erxl., Syst. Regn. Anim., 1777, p. 420.
Sciurus purpureus Zimm., Spec. Zool. Geogr. Quad., 1777, p. 518.
Sciurus elphinstonii Sykes, Proc. Zoöl. Soc., 1831, p. 103.
LARGE INDIAN SQUIRREL.
1. Adult — P. Neilgherry Hills, India. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Ratufa indica maxima (Schreber).
Sciurus maximus Schreb., Säugth., IV, 1785, p. 784, pl. CCXVII (1784).
Sciurus malabaricus Scop., Del. Flor. Faun. Insub., II, 1786, p. 85.
GREAT MALABAR SQUIRREL.
1. Adult — P. Central India. Ward's Nat. Scien. Establ., Rochester, N. Y.

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Subgenus B. **Rukaia.**

209. Ratufa bicolor (Sparrman).

Sciurus bicolor Sparrm., Götheb. Vet. Svensk. Handl., I, 1778, p. 70.

GREAT MALAY SQUIRREL.

1. Adult — P. Sarawak, Borneo. Ward's Nat. Scien. Establ., Rochester, N. Y.
2–3. Adult — P. Sumatra. E. Gerrard & Sons.
4. Adult — P. Malacca. E. Gerrard & Sons. V. A. Brooke.

210. Ratufa ephippium (Müller).

Sciurus ephippium Müll., Tijd. voor Nat. Gesch., 1839, p. 147.

GREAT BORNEAN SQUIRREL.

1. Adult — P. Borneo. E. Gerrard & Sons. S. Müller.

a. Ratufa ephippium bunguranensis (Thomas & Hartert).

Sciurus ephippium bunguranensis Thos. & Hart., Novitat. Zool., I, 1894, p. 658.

BUNGURAN ISLAND SQUIRREL.

1. Adult — P. Bunguran Island. E. Gerrard & Sons.

b. Ratufa ephippium sandakanensis Bonhote.

Sciurus bicolor ephippium Thos., Proc. Zoöl. Soc., 1889, p. 230. (nec Müller.)

Ratufa ephippium sandakanensis Bonh., Ann. Mag. Nat. Hist., 7th Ser., V, 1900, p. 497.

SANDAKAN GREAT SQUIRREL.

1. Adult — P. Paitan, N. Borneo. E. Gerrard & Sons. A. Everett.

211. Ratufa macrura (Pennant).

Sciurus macrourus Penn., Ind. Zoöl., Pt. I, 1769, pl. I.

Sciurus ceylonicus Erxl., Syst. Regn. Anim., 1777, p. 416.

Sciurus tennantii Layd., Blyth, Jour. Asiat. Soc. Beng., XVIII, 1849, p. 600.

GRIZZLED INDIAN SQUIRREL.

1. Adult — The *R. tennantii* black var. P. Ceylon. E. Gerrard & Sons.

Genus 102. **Sciurus. Tree Squirrels.**

Sciurus Linn., Syst. Nat., I, 1758, p. 63. Type *Sciurus vulgaris* Linnæus.

Guerlinguetus Gray, Lond. Med. Repos., XV, 1821, p. 304.

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Macroxus F. Cuv., Dents des Mamm., 1823, p. 162, pl. 56.
Rheithrosciurus (sic) Gray, Ann. Mag. Nat. Hist., 3rd Ser., xx, 1867, p. 272.
Callosciurus Gray, Ann. Mag. Nat. Hist., 3d Ser., xx, 1867, p. 277.
Baginia Gray, Ann. Mag. Nat. Hist., 3d Ser., xx, 1867, p. 279.
Erythrosciurus Gray, Ann. Mag. Nat. Hist., 3d Ser., xx, 1867, p. 285.
Neosciurus Trouess., Le Natural., II, 1880, p. 292.
Parasciurus Trouess., Le Natural., II, 1880, p. 292.
Echinosciurus Trouess., Le Natural., II, 1880, p. 292.
Tamiasciurus Trouess., Le Natural., II, 1880, p. 292.
Heliosciurus Trouess., Le Natural., II, 1880, p. 292.
Tunisciurus Trouess., Le Natural., II, 1880, p. 293.
Microsciurus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1895, p. 332.
Hesperosciurus Nelson, Proc. Wash. Acad. Scien., I, 1899, p. 27.
Otosciurus Nelson, Proc. Wash. Acad. Scien., I, 1899, p. 28.
Aræosciurus Nelson, Proc. Wash. Acad. Scien., I, 1899, p. 29.
Baiosciurus Nelson, Proc. Wash. Acad. Scien., I, 1899, p. 31.

Subgenus A. **Baiosciurus.**

212. Sciurus deppii Peters.

Sciurus deppei Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1863, p. 654.
Sciurus griseogena Gray, Ann. Mag. Nat. Hist., 3rd Ser., xx, 1867, p. 429.
Sciurus tephrogaster Gray, Ann. Mag. Nat. Hist., 3rd Ser., xx, 1867, p. 431.
Sciurus tæniurus Gray, Ann. Mag. Nat. Hist., 3rd Ser., xx, 1867, p. 431.
Sciurus deppii Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 101, fig. 14. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 60. Zoöl. Ser.

DEPPE'S SQUIRREL.

1. Adult — Exch. Mexico. Am. Mus. Nat. Hist. N. Y.
2–4. Adult ♂ Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.
5–6. Adult ♀ Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.

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Subgenus B. Sciurus.

213. Sciurus vulgaris Linnæus.

Sciurus vulgaris Linn., Syst. Nat., I, 1758, p. 63.
Sciurus italicus Bonap., Faun. Ital., 1838, fasc. 23, pl.
Sciurus europæus Gray, List Spec. Mamm. Brit. Mus., 1843, p. 139.

EUROPEAN SQUIRREL.

1. Adult ♀ P. Upsala, Sweden. J. A. Loring.
2. Adult ♂ P. Upsala, Sweden. J. A. Loring.
3–4. Adult ♂ P. Meiringen, Switzerland. J. A. Loring.
5. Adult ♀ P. Meiringen, Switzerland. J. A. Loring.
6. Adult ♂ P. Brunig, Switzerland. J. A. Loring.
7. Adult ♀ P. Brunig, Switzerland. J. A. Loring.
8. Adult — P. France. Ward's Nat. Scien. Establ., Rochester, N. Y.

214. Sciurus lis Temminck.

Sciurus lis Temm., Faun. Japon., 1842, p. 45, pl. XII, figs. 1–4. Jent., Notes Leyd. Mus., V, 1883, p. 115.

JAPANESE SQUIRREL.

1. Adult ♂ P. Japan. Ward's Nat. Scien. Establ., Rochester, N. Y.

215. Sciurus rufobrachiatus Waterhouse.

Sciurus rufobrachiatus Waterh., Proc. Zoöl. Soc., 1842, p. 128.
Sciurus maculatus Temm., Esquiss. Zool., 1re Part., 1853, p. 130.
Sciurus aubryi A. Milne-Edw., Rev. Mag. Zool., 1867, p. 228.
Macroxus rufobrachiatus Gray, Ann. Mag. Nat. Hist., 3rd. Ser., XX, 1867, p. 329.
Funambulus rufobrachium Fitzin., Sitzungsb. K. Akad. Wissen. Wien, 1867, p. 33.

RED-ARM SQUIRREL.

1. Adult ♂ P. Benito River, West Africa. E. Gerrard & Sons. G. L. Bates.

216. Sciurus punctatus Temminck.

Sciurus punctatus Temm., Esquiss. Zool., 1853, p. 138. Jent., Notes Leyd. Mus., IV, 1882, p. 21.
Sciurus rufobrachiatus Huet, Nouv. Archiv. Mus. Hist. Nat. Paris, 1880, p. 144. (Part.)

SPOTTED SQUIRREL.

1. Adult — P. West Africa. E. Gerrard & Sons.

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Subgenus C. **Macroxus.**

a. Sciurus erythræus punctatissimus (Gray).
Macroxus punctatissimus Gray, Ann. Mag. Nat. Hist., 3rd Ser. xx, 1867, p. 283.
GRAY'S SQUIRREL.
1. Adult — P. S. India. E. Gerrard & Sons.

217. Sciurus rubriventer Müller & Schlegel.
Sciurus rubriventer (Forst.) Müll. & Schleg., Temm. Verhandl. over de Natuur. Ges. Nederl., 1839–1844, p. 86. Jent., Notes Leyd. Mus., v, 1883, p. 128.
RED-BELLIED SQUIRREL.
1. Adult ♂ P. Tannya, Celebes. E. Gerrard & Sons.

218. Sciurus castaneiventris Gray.
Sciurus castaneoventris Gray, Ann. Mag. Nat. Hist., 1st Ser., x, 1842, p. 263.
Sciurus griseopectus Blyth, Jour. Asiat. Soc. Beng., xvi, 1847, p. 873.
Sciurus erythræus Swinh., Proc. Zoöl. Soc., 1862, p. 357. (Part.)
CHESTNUT-BELLIED SQUIRREL.
1. Adult — P. China. E. Gerrard & Sons.

a. Sciurus castaneiventris ningpoensis Bonhote.
Sciurus castaneoventris ningpoensis Bonhote, Ann. Mag. Nat. Hist., 7th Ser., vii, 1901, p. 163.
NINGPO VINOUS-BELLIED SQUIRREL.
1. Adult ♀ P. Ningpo, China. E. Gerrard & Sons.

219. Sciurus flavimanus Is. Geoffroy.
Sciurus flavimanus Is. Geoffroy, Mag. Zool., 1832, p. 1.
YELLOW-HANDED SQUIRREL.
1. Adult ♂ P. Kan Raryit, Brit. Burma. E. Gerrard & Sons. T. Darling, Jr.

220. Sciurus hippurus Is. Geoffroy.
Sciurus hippurus I. Geoff., Étud. Zool., i, 1832, pl. 6. Jent., Notes Leyd. Mus., v, 1883, p. 118.
Sciurus rufogaster Gray, Ann. Mag. Nat. Hist., 1st Ser., x, 1842, p. 263.
HEAVY-TAILED SQUIRREL.
1. Adult ♀ P. Baram, Borneo. E. Gerrard & Sons. A. Everett.

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a. Sciurus hippurus grayi Bonhote.

Sciurus hippurus grayi Bonh., Ann. Mag. Nat. Hist., 7th Ser., VII, 1901, p. 171, (note).

GRAY'S BORNEAN SQUIRREL.

1. Adult ♂ P. Lawas District, Borneo. E. Gerrard & Sons. A. Everett.

221. Sciurus pryeri Thomas.

Sciurus pryeri Thos., Ann. Mag. Nat. Hist., 6th Ser., X, 1892, p. 214.

PRYER'S SQUIRREL.

1. Adult — P. Bongon, Borneo. E. Gerrard & Sons. A. Everett.

222. Sciurus vittatus Raffles.

Sciurus vittatus Raffles, Trans. Linn. Soc., XIII, 1822, p. 259.

Sciurus bivittatus Desm., Mamm., Suppl., 1822, p. 543.

Macroxus vittatus F. Cuv., Hist. Nat. Mamm., 1824, pl. CCXXXIV.

Macroxus toupai Less., Man. Mamm., 1827, p. 238.

Sciurus badging Kerr, Thos., Proc. Zoöl. Soc., 1886, p. 76.

**Sciurus notatus* Bodd., Thos., Proc. Zoöl. Soc., 1889, p. 231. (Part.)

Sciurus notatus miniatus Miller, Proc. Wash. Acad. Scien., II, 1900, p. 79.

Sciurus vittatus typicus Bonh., Ann. Mag. Nat. Hist., 7th Ser., VII, 1901, p. 447.

STRIPED SQUIRREL.

1. Adult — P. Sumatra. E. Gerrard & Sons.
2. Adult ♂ P. Malacca. E. Gerrard & Sons.
3. Adult ♂ P. Malacca. E. Gerrard & Sons. A. R. Wallace.
4. Adult — P. Malacca. Ward's Nat. Scien. Establ., Rochester, N. Y.

223. Sciurus nigrivittatus Horsfield.

Sciurus nigrovittatus Horsf., Zoöl. Res. Java, 1824, p.

BLACK-STRIPED SQUIRREL.

1. Adult — P. Sumatra. E. Gerrard & Sons.
2. Adult — P. Singapore. E. Gerrard & Sons.
3. Adult ♀ P. Badging, India. E. Gerrard & Sons. H. O. Forbes.

224. Sciurus brookii Thomas.

Sciurus brookei Thos., Ann. Mag. Nat. Hist., 6th Ser., IX, 1892, p. 253.

BROOKE'S SQUIRREL.

1. Adult — P. Lawas Mountains, Borneo. E. Gerrard & Sons.

*True *S. notatus* appears to be restricted exclusively to Java.

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225. Sciurus lowii Thomas.

Sciurus lowii Thos., Ann. Mag. Nat. Hist., 6th Ser., IX, 1892 p. 253.

LOWE'S SQUIRREL.

1. Adult — P. Paitan, N. Borneo. E. Gerrard & Sons. A. Everett.

226. Sciurus jentinki Thomas.

Sciurus jentinki Thos., Ann. Mag. Nat. Hist., 5th Ser., XX, 1887, p. 138.

JENTINK'S SQUIRREL.

1. Adult — P. Kina Balu, Borneo. E. Gerrard & Sons. A. Everett.

227. Sciurus leucomus Müller & Schlegel.

Sciurus leucomus Müll. & Schleg., Verhandl. over de Natuur. Gesch. Nederl., 1839, p. 87. Jent., Notes Leyd. Mus., V, 1883, p. 251.

CELEBES SQUIRREL.

1. Adult ♂ P. Rosokan, Celebes. E. Gerrard & Sons. E. & C. Hose.

228. Sciurus steerii Günther.

Sciurus steerii Günth., Proc. Zoöl. Soc., 1876, p. 735.

STEERE'S SQUIRREL.

1. Adult ♂ P. Paragoa, Philippines. J. B. Steere.
2. Adult — P. Paragoa, Philippines. J. B. Steere.

229. Sciurus samarensis Steere.

Sciurus samarensis Steere, List Birds & Mamm. Philipp., 1890, p. 29. Meyer, Abh.-Ber. Zool. Mus. Dresd., 1896, p. 28, pl. XI, fig. 2.

ISLAND OF SAMAR SQUIRREL.

1. Adult ♀ Type, No. 1080. P. Island of Samar, Philippines. J. B. Steere.
2. Adult ♀ Paratype. P. Island of Samar, Philippines. J. B. Steere.

230. Sciurus mindanensis Steere.

Sciurus mindanensis Steere, List Birds & Mamm. Philipp., 1890. p. 29. Jent., Notes Leyd. Mus., V, 1883, p. 129.

ISLAND OF MINDANAO SQUIRREL.

1. Adult — Type, No. 1077. P. Island of Mindanao, Philippines. J. B. Steere.
2. Adult — Paratype P. Island of Mindanao, Philippines. J. B. Steere.

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Subgenus D. **Callosciurus.**

231. Sciurus prevosti Desmarest.

Sciurus prevostii Desm., Mamm., 1822, p. 335.

PREVOST'S SQUIRREL.

1. Adult — P. Malacca. Ward's Nat. Scien. Establ., Rochester, N. Y.

2–3. Adult ♀ P. Malacca. E. Gerrard & Sons.

a. Sciurus prevosti borneensis Müller & Schlegel.

Sciurus prevostii var. *borneoensis* Müll. & Schleg., Verhandl. over de Natuur. Gesch. Nederl., 1839–44, p. 86.

BORNEAN PREVOST SQUIRREL.

1. Adult — P. Batu Sang, Borneo. E. Gerrard & Sons. E. Hose.

b. Sciurus prevosti kuchingensis Bonhote.

Sciurus prevostii kuchingensis Bonh., Ann. Mag. Nat. Hist., 7th Ser., VII, 1901, p. 170.

KUCHING PREVOST SQUIRREL.

1. Adult — P. Penrisen Hills. E. Gerrard & Sons. A. Everett.

232. Sciurus caroli Bonhote.

Sciurus prevostii Desm., Hose's Mamm. Borneo, 1893, p. 45. (Part.)

Sciurus caroli Bonh., Ann. Mag. Nat. Hist., 7th Ser., VII, 1901, p. 173.

HOSE'S SQUIRREL.

1. Adult ♀ P. Iniri River, Sarawak, Borneo. E. Gerrard & Sons. C. Hose.

a. Sciurus caroli griseicauda Bonhote.

Sciurus caroli griseicauda Bonh., Ann. Mag. Nat. Hist., 7th Ser., VII, 1901, p. 174.

GRAY-TAILED SQUIRREL.

1. Adult ♀ P. Batu Sang, Borneo. E. Gerrard & Sons. C. Hose.

233. Sciurus baluensis Bonhote.

Sciurus baluensis Bonh., Ann. Mag. Nat. Hist., 7th Ser., VII, 1901, p. 174.

MOUNT KINA BALU SQUIRREL.

1. Adult ♀ Topotype. P. Mount Kina Balu, Borneo. E. Gerrard & Sons. A. Everett.

a. Sciurus rufoniger pluto (Gray).

Macroxus pluto Gray, Ann. Mag. Nat. Hist., 3d. Ser., XX, 1867, p. 283.

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BLACK SQUIRREL.

1. Adult ♂ P. Labuan, Borneo. E. Gerrard & Sons. A. Everett.
2. Adult — P. Malingai Mt., Borneo. E. Gerrard & Sons. A. Everett.
3. Adult ♂ P. Bongon, N. Borneo. E. Gerrard & Sons. A. Everett.

Subgenus E. Erythrosciurus.

234. Sciurus finlaysoni Horsfield.

Sciurus finlaysoni Horsf., Zoöl. Res. Java, 1824.

Sciurus splendens Gray, Ann. Mag. Nat. Hist., 1st Ser., x, 1842, p. 62.

FINLAYSON'S SQUIRREL.

1. Adult — P. Sanga Island. E. Gerrard & Sons.

This specimen is apparently of the *S. harmandi* style with a tendency to red beneath.

Subgenus F. Baginia.

235. Sciurus locrioides Hodgson.

Sciurus lokrioides Hodg., Jour. Asiat. Soc. Beng., v, 1836, p. 332. Gray, Ann. Mag. Nat. Hist., 3rd Ser., xx, 1867, p. 274.

Sciurus locrioides Hodg., Jour. Asiat. Soc. Beng., x, p. 915.

Sciurus assamensis McClell., apud Gray, List Spec. Mamm. Brit. Mus., 1843, p. 143. (desc. nulla.)

Sciurus blythii Tytler, Ann. Mag. Nat. Hist., 2nd Ser., xiv, 1854, p. 172.

Macroxus similis Gray, Ann. Mag. Nat. Hist., 3rd Ser., xx, 1867, p. 281.

HOARY-BELLIED HIMALAYAN SQUIRREL.

1. Adult ♀ P. Cachar, India. E. Gerrard & Sons. E. Inglis.
2. Adult ♂ P. India. E. Gerrard & Sons.

236. Sciurus tenuis Horsfield.

Sciurus tenuis Horsf., Zoöl. Res. Java, 1824, p.

Sciurus affinis Horsf., Zoöl. Res. Java, 1824. p. (nec Raffles.)

Sciurus modestus Müll. & Schleg., Verhandl. over de Natuur. Gesch. Nederl., 1849–44, p. 96, pl. xxiv.

SLENDER SQUIRREL.

1. Adult — P. Penrisen Hills. E. Gerrard & Sons. A. Everett.

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Subgenus G. Guerlinguetus.

a. Sciurus æstuans hoffmanni Peters.

Sciurus æstuans var. *hoffmanni* Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1863, p. 654.

Sciurus xanthotus Gray, Ann. Mag. Nat. Hist., 3rd Ser., xx, 1867, p. 429.

Sciurus griseogena! Gray, Ann. Mag. Nat. Hist., 3rd Ser., xx, 1867, p. 430. (Part. Costa Rica specimens.)

Sciurus rufoniger Allen, Mon. N. Am. Rod., 1877, p. 757. (Part. Costa Rica specimens.)

Sciurus griseogenys Alston, Proc. Zoöl. Soc., 1878, p. 667. (Part. Costa Rica, & Veragua Panama, specimens.)

Sciurus æstuans hoffmanni Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 104, fig. 15. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 61. Zoöl. Ser.

HOFFMANN'S SQUIRREL.

1. Adult ♂ P. Ypura. E. Gerrard & Sons.
2. Adult ♀ P. Lacagua. E. Gerrard & Sons.
3-4. Adult — P. Costa Rica. E. Gerrard & Sons.
5. Adult ♂ P. Costa Rica. C. F. Underwood.
6. Adult ♀ P. Costa Rica. C. F. Underwood.
7. Adult ♂ Exch. Borneo, Costa Rica. Am. Mus. Nat. Hist. N. Y. G. K. Cherrie.
8. Adult ♀ Exch. Borneo, Costa Rica. Am. Mus. Nat. Hist. N. Y. G. K. Cherrie.
9-12. Adult ♂ P. Boquete, Chiriqui, Costa Rica. J. H. Batty.
13-16. Adult ♀ P. Boquete, Chiriqui, Costa Rica. J. H. Batty.
17. Adult ♂ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.
18. Adult ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

237. Sciurus chapmani Allen.

Sciurus æstuans hoffmanni Allen & Chapm., Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 17. (nec Peters.)

Sciurus chapmani Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1899, p. 16.

CHAPMAN'S SQUIRREL.

1-2. Adult ♂ Exch. Princestown, Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

238. Sciurus langsdorffi Brandt.

Sciurus langsdorffi Brandt, Mém. Acad. St. Pétersb., 1835, p. 428, pl. II.

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Subgenus I. **Parasciurus.**

243. Sciurus rufiventer E. Geoffroy.

Sciurus rufiventer E. Geoff., Cat. Mamm. Mus. Hist. Nat. Paris, 1803, p. 176.

Sciurus ludovicianus Custis, Bart. Med. & Phys. Jour., II, Pt. II, 1806, p. 47. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 52. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 64. Zoöl. Ser.

Sciurus macroura Say, Long's Exped. Rocky Mts., I, 1823, p. 115.

Sciurus magnicaudatus Harl., Faun. Amer., 1825, p. 178.

Sciurus subauratus Bachm., Proc. Zoöl. Soc., 1838, p. 87.

Sciurus auduboni Bachm., Proc. Zoöl. Soc., 1838, p. 97.

Sciurus occidentalis Aud. & Bachm., Jour. Acad. Nat. Scien. Phil., 1842, p. 317.

Sciurus sayi Aud. & Bachm., Quad. N. Amer., II, 1851, p. 274, pl. LXXXIX.

FOX SQUIRREL.

1. Adult — P. Iowa. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♂ Exch. Camp Douglas, Wisconsin. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
3. Adult ♀ Exch. Warsaw, Illinois. Am. Mus. Nat. Hist. N. Y. C. K. Worthern.

4–5. Adult ♀ Pres. Hicksville, Ohio. H. Meek.
6–8. Adult — Pres. Hicksville, Ohio. H. Meek.
9–13. Adult ♂ P. Knoxville, Iowa. G. K. Cherrie.
14. Adult ♀ Coll. Noble, Oklahoma Terr. T. Surber.
15–21. Adult ♂ P. Lawrence, Kansas. J. Rowley.
22–27. Adult ♀ P. Lawrence, Kansas. J. Rowley.

a. Sciurus rufiventer texensis (Bachman).

Sciurus texianus ! Bachm., Proc. Zoöl. Soc., 1838, p. 86.

Sciurus limitis Baird, Proc. Acad. Nat. Scien. Phil., 1855, p. 331.

Sciurus ludovicianus limitis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 53. Zoöl. Ser.

Sciurus rufiventer texensis Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 110, fig. 17. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 65. Zoöl. Ser.

TEXAS FOX SQUIRREL.

1–2. Adult ♂ Exch. Fort Clarke, Texas. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

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3. Adult ♂ Coll. Sabinas, State of Coahuila, Mexico. Heller & Barber.
4–5. Adult — Coll. Sabinas, State of Coahuila, Mexico. Heller & Barber.

b. Sciurus rufiventer neglectus (Gray).

Sciurus vulpinus Schreb., Säugth., IV, 1792, p. 772. (nec Gmelin.)

Sciurus cinereus Le Conte, App. McMurt. Cuv., Régn. Anim., 1831, p. 433. (nec Linnæus.)

Macroxus neglectus Gray, Ann. Mag. Nat. Hist., 3rd Ser., XX, 1867, p. 425.

Sciurus ludovicianus vicinus Bangs, Proc. Biol. Soc. Wash., X, 1896, p. 150. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 52. Zoöl. Ser.

Sciurus rufiventer neglectus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1902, p. 22. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 65. Zoöl. Ser.

EASTERN FOX SQUIRREL.

1. Adult ♂ P. White Sulphur Springs, West Virginia. T. Surber.
2–4. Adult ♀ P. Lewisburg, West Virginia. T. Surber.
5. Adult ♂ P. Wilson, New York. C. K. Worthern.

244. Sciurus durangi (Thomas).

Sciurus aberti Thos., Proc. Zoöl. Soc., 1882, p. 372. (nec Woodhouse.)

Sciurus aberti durangi Thos., Ann. Mag. Nat. Hist., 6th Ser., XI, 1893, p. 28.

Sciurus durangi Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 112. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 67. Zoöl. Ser.

DURANGO SQUIRREL.

1–5. Adult ♂ Coll. Coyotes, State of Durango. Heller & Barber.
6–9. Adult ♀ Coll. Coyotes, State of Durango. Heller & Barber.

245. Sciurus niger Linnæus.

Sciurus niger Linn., Syst. Nat., I, 1758, p. 64. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 51, fig. 10. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 66. Zoöl. Ser.

Sciurus cinereus Linn., Syst. Nat., I, 1758, p. 64. (Part.)

Sciurus vulpinus Gmel., Syst. Nat., I, 1788, p. 147

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243. Sciurus rufiven

Sciurus rufivente

1803, p. 176.

Sciurus ludovici

1806, p. 47.

1901, p. 52.

& W. Indie

Sciurus macro

Sciurus magni

Sciurus subau

Sciurus audu

Sciurus occid

1842, p

Sciurus sa

pl. LXX

FOX SQUIRRE

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Subgenus K. **Echinosciurus.**

rus **aureigaster** F. Cuvier.

niger Erxl., Syst. Regn. Anim., 1777, p. 417. (nec Linn.)

variegatus Desm., Nouv. Dict. Hist. Nat., x, 1817, p. 93. (nec Erxl., 1777.)

aureogaster F. Cuv., Hist. Nat. Mamm., vi, 1829, pl. text.

rufiventer Licht., Abh. K. Akad. Wiss. Berl., (1827) 1830, p. 116. (nec E. Geoffroy.)

leucogaster F. Cuv., Suppl. Hist. Nat. Buffon, i, 1831, p. 300.

mustelinus Aud. & Bachm., Proc. Acad. Nat. Scien. Phil. 1841, p. 100.

aurogaster! Aud. & Bachm., Quad. N. Amer., iii, 1851, p. 344.

hypoxanthus I. Geoff., Voy. de la Vénus, Zoöl., 1855, p. 158.

hypopyrrhus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 222. (nec Wagler.)

Sciurus leucops Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 198.

Sciurus aureigaster Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., iv, Pt. i, 1904, p. 115, figs. 19, xxix. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., vi, 1905, p. 68. Zoöl. Ser.

Fig. XXVI. Sciurus aureigaster. Golden-bellied Squirrel.

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SOUTHERN FOX SQUIRREL.

1. Adult — P. Florida. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♀ Coll. Riceboro, Georgia. T. Surber.
3–4. Adult ♂ Exch. Tarpon Springs, Florida. Am. Mus. Nat. Hist. N. Y. W. E. D. Scott.
5. Adult ♂ Exch. Madisonville, Louisiana. Am. Mus. Nat. Hist. N. Y. G. Kohn.
6. Adult ♂ Exch. St. Tammany Parish, Louisiana. Am. Mus. Nat Hist. N. Y. G. Kohn.
7. Adult —Exch. St. Tammany Parish, Louisiana. Am. Mus. Nat. Hist. N. Y. C. S. Galbraith.
8. Adult ♂ Coll. New Berlin, Florida. T. Surber.
9. Adult ♀ Black var. Coll. New Berlin, Florida. T. Surber.
10. Adult ♀ P. Bellair, Florida. C. S. Brimley.

Subgenus J. **Otosciurus.**

246. Sciurus aberti Woodhouse.

Sciurus dorsalis Woodh., Proc. Acad. Nat. Scien. Phil., 1852, p. 110. (nec Gray.)

Sciurus aberti Woodh., Proc. Acad. Nat. Scien. Phil., 1852, p. 220. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 57, fig. 13. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 66. Zoöl. Ser.

ABERT'S SQUIRREL.

1. Adult ♂ Exch. White Mountains, Arizona. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
2. Adult ♀ Exch. Stoneman's Lake, Arizona. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
3. Adult ♂ Exch. Cañon Creek, Arizona. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
4. Adult ♀ Exch. Cañon Creek, Arizona. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
5. Adult ♀ Exch. Mogollon Mts., Arizona. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
6. Adult ♂ P. San Francisco Mts., Arizona. F. Stephens.
7. Adult ♀ P. Cooley's Ranch, Arizona. J. Diefenbach.
8–9. Adult ♀ P. White Mts., Arizona. B. C. Condit.

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Subgenus K. **Echinosciurus.**

247. Sciurus aureigaster F. Cuvier.

Sciurus niger Erxl., Syst. Regn. Anim., 1777, p. 417. (nec Linn.)

Sciurus variegatus Desm., Nouv. Dict. Hist. Nat., x, 1817, p. 103. (nec Erxl., 1777.)

Sciurus aureogaster F. Cuv., Hist. Nat. Mamm., vi, 1829, pl. text.

Sciurus rufiventer Licht., Abh. K. Akad. Wiss. Berl., (1827) 1830, p. 116. (nec E. Geoffroy.)

Sciurus leucogaster F. Cuv., Suppl. Hist. Nat. Buffon, i, 1831, p. 300.

Sciurus mustelinus Aud. & Bachm., Proc. Acad. Nat. Scien. Phil. 1841, p. 100.

Sciurus aurogaster! Aud. & Bachm., Quad. N. Amer., iii, 1851, p. 344.

Sciurus hypoxanthus I. Geoff., Voy. de la Vénus, Zoöl., 1855, p. 158.

Sciurus hypopyrrhus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 222. (nec Wagler.)

Sciurus leucops Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 198.

Sciurus aureigaster Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., iv, Pt. i, 1904, p. 115, figs. 19, xxix. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., vi, 1905, p. 68. Zoöl. Ser.

FIG. XXVI. SCIURUS AUREIGASTER. GOLDEN-BELLIED SQUIRREL.

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GOLDEN-BELLIED SQUIRREL. *Ardilla* in Mexico.

1. Adult ♀ Exch. Rio Carono, Mexico. Am. Mus. Nat. Hist. N. Y. J. M. Privur.
2. Adult ♀ P. Plan del Rio, State of Vera Cruz, Mexico. E. Gerrard & Sons.

a. Sciurus aureigaster hypopyrrhus (Wagler).

Sciurus hypopyrrhus Wagl., Isis, 1831, pp. 510–511.

Macroxus morio Gray, Ann. Mag. Nat. Hist., 3rd Ser., xx, 1867, p. 424.

Macroxus maurus Gray, Ann. Mag. Nat. Hist., 3rd Ser., xx, 1867, p. 425.

Sciurus variegatus Sumichr., La Natural., v, 1882, p. 324.

Sciurus aureogaster Allen, Bull. Am. Mus. Nat. Hist. N. Y., III, 1890, p. 181.

Sciurus aureigaster hypopyrrhus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 116. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 68. Zoöl. Ser.

FIRE-BELLIED SQUIRREL.

1–8. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

9–14. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

b. Sciurus aureigaster frumentor Nelson.

Sciurus aureogaster frumentor Nelson, Proc. Biol. Soc. Wash., XII, 1898, p. 154.

Sciurus aureigaster frumentor Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 117. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 69. Zoöl. Ser.

PEROTE SQUIRREL.

1. Adult ♂ Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.
2. Adult ♀ Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.

a. Sciurus poliopus nemoralis (Nelson).

Sciurus albipes nemoralis Nels., Proc. Biol. Soc. Wash., XII, 1898, p. 151.

Sciurus wagneri nemoralis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1898, p. 454.

Sciurus poliopus nemoralis Nels., Proc. Wash. Acad. Scien., I,

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1899, p. 50. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 118. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 70. Zoöl. Ser.

MICHOACAN SQUIRREL.

1. Adult ♂ P. State of Jalisco, Mexico. E. Gerrard & Sons. A. C. Buller.

b. Sciurus poliopus peregrinator Nelson.

Sciurus poliopus peregrinator Nels., Proc. Biol. Soc. Wash., XVII, 1904, p. 149. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 70. Zoöl. Ser.

PUEBLA SQUIRREL.

1. Adult ♂ Coll. Apiluluca, State of Puebla? Mexico. G. F. Breninger.

c. Sciurus poliopus cervicalis (Allen).

Sciurus leucops Allen, Mon. N. Am. Rod., 1877, p. 753. (nec Gray.)

Sciurus variegatus Alston, Biol. Centr. Amer., Mamm., I, 1880, p. 127. (nec Erxl.)

Sciurus aureogaster leucops Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1889, p. 166.

Sciurus cervicalis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 183.

Sciurus wagneri cervicalis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1898, p. 454.

Sciurus poliopus cervicalis Nels., Proc. Wash. Acad. Scien., I, 1899, p. 51. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 119. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 71. Zoöl Ser.

COLIMA MOUNTAIN SQUIRREL.

1. Adult ♂ Exch. Sierra Nevada de Colima, State of Jalisco, Mexico. Am. Mus. Nat. Hist. N. Y. A. Buller.
2. Adult ♀ Paratype. Exch. Hacienda San Marcos, State of Tonila, Mexico. Am. Mus. Nat. Hist. N. Y. A. Buller.

248. Sciurus colliæi Richardson.

Sciurus colliæi Rich., Voy. 'Blossom,' Zoöl., 1839, p. 8. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 121. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 73. Zoöl. Ser.

COLLIE'S SQUIRREL.

1. Adult ♂ P. Valle de Banderas, Mexico. E. Gerrard & Sons.

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249. Sciurus sinaloensis Nelson.

Sciurus sinaloensis Nelson, Proc. Wash. Acad. Scien., I, 1899, p. 60. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 122. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 73. Zoöl. Ser.

SINALOA SQUIRREL.

1. Adult ♀ P. State of Sinaloa, Mexico. P. O. Simons.
2–3. Adult ♂ P. Mazatlan, State of Sinaloa, Mexico. A. Forrer.
4–5. Adult ♀ P. Mazatlan, State of Sinaloa, Mexico. A. Forrer.

250. Sciurus socialis Wagner.

Sciurus socialis Wagn., Abh. Math.-Phys. Cl. K. Bayer. Akad. Wiss. München, II, 1837, p. 501, pl. V. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 123. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 73. Zoöl. Ser.

Sciurus aureigaster Allen, Mon. N. Am. Rodent., 1877, p. 750. (Part.)

Sciurus variegatus Alston, Proc. Zoöl. Soc., 1878, p. 660. (Part.)

TEHUANTEPEC SQUIRREL.

1. Adult ♂ Exch. Tehuantepec, Mexico. Am. Mus. Nat. Hist. N. Y. A. Buller.
2. Adult ♀ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.
3. Adult ♂ Coll. San Geronimo, State of Oaxaca, Mexico Heller & Barber.
4–5. Adult ♀ Coll. San Geronimo, State of Oaxaca, Mexico. Heller & Barber.

251. Sciurus griseiflavus (Gray).

Macroxus griseoflavus Gray, Ann. Mag. Nat. Hist., 3rd Ser., XX, 1867, p. 427.

Sciurus ludovicianus Tomes, Proc. Zoöl. Soc., 1861, p. 281. (nec Custis.)

Sciurus aureigaster Allen, Mon. N. Am. Rod., 1877, p. 750. (Part.)

Sciurus affinis Alston, Proc. Zoöl. Soc., 1878, p. 660.

Sciurus griseiflavus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 124. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 74. Zoöl. Ser.

GUATEMALA SQUIRREL.

1. Adult — P. Guatemala. E. Gerrard & Sons. C. F. Underwood.

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252. Sciurus yucatanensis (Allen).

Sciurus carolinensis yucatanensis Allen, Mon. N. Am. Rod., 1877, p. 705.

Sciurus carolinensis Alston, Proc. Zoöl. Soc., 1878, p. 658.

Sciurus yucatanensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 5. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 125. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 75. Zoöl. Ser.

YUCATAN SQUIRREL.

1. Adult ♀ Exch. Chichen Itza, Yucatan. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
2. Adult ♀ Pres. San Felipe, Yucatan. H. H. Brown.
3. Adult ♀ Pres. Rio Lagatos, Yucatan. H. H. Brown.

a. Sciurus adolphii dorsalis (Gray).

Sciurus dorsalis Gray, Proc. Zoöl. Soc., 1848, p. 138.

Sciurus rigidus Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1863, p. 652.

Sciurus intermedius Gray, Ann. Mag. Nat. Hist., 3rd Ser., XX, 1867, p. 421.

Sciurus nicoyana Gray, Ann. Mag. Nat. Hist., 3rd Ser., XX, 1867, p. 423.

Sciurus boothiæ Allen, Mon. N. Am. Rod., 1877, p. 741. (Part. West Costa Rica specimens.)

Sciurus hypopyrrhus Allen, Mon. N. Am. Rod., 1877, p. 746. (Part. West Costa Rica specimens.)

Sciurus adolphei dorsalis Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 127. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 76. Zoöl. Ser.

BANDED-BACK SQUIRREL.

1. Adult ♀ Exch. Alajuela, Costa Rica. Am. Mus. Nat. Hist. N. Y. A. Alfaro.
2. Adult ♀ Exch. La Carpintera, Costa Rica. Am. Mus. Nat. Hist. N. Y. G. K. Cherrie.

3–4. Adult ♀ P. ——— ? Costa Rica. E. Gerrard & Sons.
5–6. Adult ♂ P. Miravalles, Costa Rica. E. Gerrard & Sons.
7. Adult ♀ P. Miravalles, Costa Rica. E. Gerrard & Sons.

253. Sciurus melania (Gray).

Macroxus melania Gray, Ann. Mag. Nat. Hist., 3rd Ser., XX, 1867, p. 425.

Sciurus melania Elliot, Mamm. Middle Amer. & W. Indies, F. C.

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M. Pub., IV, Pt. I, 1904, p. 128. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 76. Zoöl. Ser.

GRAY'S BLACK SQUIRREL.

1–4. Adult ♂ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.
5–8. Adult ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.
9. Adult ♂ P. Boquete, Chiriqui, Costa Rica. J. H. Batty.
10. Juv. ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

254. Sciurus variabilis Is. Geoffroy.

Sciurus variabilis Is. Geoff., Mag. Zool., I, 1832, pl. IV.

Sciurus gerrardi Gray, Proc. Zoöl. Soc., 1861, p. 92, pl. XVI. (Part.)

VARIABLE SQUIRREL.

1. Adult ♂ P. Chauchamago. E. Gerrard & Sons.

a. Sciurus saltuensis bondæ Allen.

Sciurus variabilis Bangs, Proc. Biol. Soc. Wash., XI, 1898, p. 184. (nec I. Geoff.)

Sciurus saltuensis bondæ Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1899, p. 213.

BONDA SQUIRREL.

1–5. Adult ♂ Paratypes. P. Bonda, Colombia, South America. H. H. Smith.
6–10. Adult ♀ Paratypes. P. Bonda, Colombia, South America H. H. Smith.

Subgenus L. **Neosciurus.**

255. Sciurus carolinensis Gmelin.

Sciurus carolinensis Gmel., Syst. Nat., I, 1788, p. 148. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 53, fig. 11. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 78. Zoöl. Ser.

CAROLINA GRAY SQUIRREL.

1–3. Adult — Pres. Hicksville, Ohio. H. Meek.
4–12. Adult ♂ P. White Sulphur Springs, W. Virginia. T. Surber.
13. Adult ♀ P. White Sulphur Springs, W. Virginia. T. Surber.
14–15. Adult ♀ Coll. Calhoun Falls, South Carolina. T. Surber.
16–18. Adult ♂ Coll. St. Marys, Georgia. T. Surber.
19. Adult ♀ Coll. St. Marys, Georgia. T. Surber.
20. Adult ♂ Coll. Crystal River, Florida. T. Surber.

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21. Adult ♂ Coll. Enterprise, Florida. T. Surber.
22–23. Adult ♀ Coll. Enterprise, Florida. T. Surber.
24–25. Adult ♂ Coll. Tarpon Springs, Florida. T. Surber.
26. Adult ♂ Coll. Micco, Florida. T. Surber.
27. Adult ♀ Coll. E. Penn., opp. Micco, Florida. T. Surber.
28. Adult ♂ Coll. Oak Lodge, Florida. T. Surber.
*29. Adult ♀ Coll. St. Charles Creek, Florida. T. Surber.
30–34. Adult — Coll. Greenway, Clay County, Arkansas. S. E. Meek.
35. Adult ♀ Exch. Raleigh, North Carolina. Am. Mus. Nat. Hist. N. Y. H. H. &. C. S. Brimley.
36. Adult ♂ Coll. Apex, North Carolina. T. Surber.
37. Adult— Albino. Pres. ——— ? E. E. Ayer.

a. *Sciurus carolinensis leucotis* (Gapper).

Sciurus cinereus Schreb., Säugth., IV, 1792, p. 766, pl. CCXCII. (nec Linn.)

? *Sciurus pennsylvanicus* Ord, Guth. Geogr., 2nd Am. ed., II, 1815, p. 292.

? *Sciurus hiemalis* Ord, Guth. Geogr., 2nd Am. ed., II, 1815, p. 292.

Sciurus niger Godman, Am. Nat. Hist., II, 1826, p. 133. (nec Linn.)

Sciurus leucotis Gapper, Zoöl. Journ., V, 1830, p. 206.

Sciurus vulpinus DeKay, Nat. Hist. N. Y., I, Zoöl., 1842, p. 59. (nec Gmel.)

Sciurus migratorius Aud. & Bachm., Quad. N. Am., I, 1849, p. 265, pl. XXXV.

Sciurus carolinensis leucotis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 53. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 79. Zoöl. Ser.

NORTHERN OR WHITE-BARED GRAY SQUIRREL.

1. Adult ♂ Exch. Hastings, New York. Am. Mus. Nat. Hist. N. Y. J. Rowley.
2. Adult ♀ Exch. Hastings, New York. Am. Mus. Nat. Hist. N. Y. J. Rowley.
3. Adult ♀ Exch. Lawyerville, New York. Am. Mus. Nat. Hist. N. Y. J. Rowley.
4. Adult ♂ Black var. Exch. Erie, Pennsylvania. Am. Mus. Nat. Hist. N. Y. G. B. Sennett.

*Among the Florida specimens are some that probably might be considered as *S. c. extimus* Bangs. Regarding this, however, see remarks in Pub. Field Columb. Mus., III, 1901, p. 35. Zoöl. Ser.

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5. Adult ♀ Black var. Exch. Erie, Pennsylvania. Am. Mus. Nat. Hist. N. Y. G. B. Sennett.
6. Adult ♂ Black var. P. White Sulphur Springs, W. Virginia. T. Surber.
7. Adult ♂ P. White Sulphur Springs, W.Virginia. T. Surber.
8–9. Adult ♀ P. White Sulphur Springs, W.Virginia. T. Surber.
10. Adult — P. New York. Ward's Nat. Scien. Establ., Rochester, N. Y.
11. Adult — Black var. P. New York. Ward's Nat. Scien. Establ., Rochester, N. Y.
12. Juv. ♀ Exch. Van Cortlandt, New York. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

b. Sciurus carolinensis hypophæus Merriam.

Sciurus carolinensis hypophæus Merr., Scien., VIII, 1886, p. 351. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 54. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 79. Zoöl. Ser.

MINNESOTA GRAY SQUIRREL.

1–2. Adult ♀ Exch. Houston, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

c. Sciurus carolinensis fuliginosus (Bachman).

Sciurus fuliginosus Bachm., Proc. Zoöl. Soc., 1838, p. 97.

Sciurus carolinensis fuliginosus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 55. Zoöl Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 79. Zoöl. Ser.

DUSKY GRAY SQUIRREL.

1–2. Adult ♂ Exch. New Orleans, Louisiana. Am. Mus. Nat. Hist. N. Y. G. Kohn.

Subgenus M. Hesperosciurus.

256. Sciurus griseus Ord.

Sciurus griseus Ord, Guth. Geogr., 2nd Am. ed., II, 1815, p. 292. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 55, fig. 12. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 130, fig. 20. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 78. Zoöl. Ser.

Sciurus fossor Peale, U. S. Expl. Exped., Mamm. & Birds, 1848, p. 55.

Sciurus heermanni Le Conte, Proc. Acad. Nat. Scien. Phil., 1852, p. 149.

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Sciurus leporinus Hensh., Ann. Rep. Engin., 1876, p. 25.

Sciurus fossor anthonyi Mearns, Proc. U. S. Nat. Mus., xx, 1898, p. 501.

Sciurus griseus anthonyi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 57. Zoöl. Ser.

CALIFORNIA GRAY SQUIRREL.

1. Adult ♀ P. Swiss River, Calaveras County, California. W. W. Price.
2–3. Adult ♂ P. Swiss River, Calaveras County, California. W. W. Price.
4–5. Adult ♀ Coll. Petaluma, California. E. Heller.
6. Adult ♂ Coll. Eureka, California. E. Heller.
7. Adult ♂ P. Snow Mountains, California. J. Diefenbach.
8–11. Adult ♀ P. Snow Mountains, California. J. Diefenbach.
12. Adult ♂ Exch. Nicasio, California. Am. Mus. Nat. Hist. N. Y.
13. Adult ♂ Coll. Hot Spring, Mt. Whitney, California. E. Heller.
14–15. Adult ♂ Exch. Campbell's Ranch, Laguna Mts., California. Am. Mus. Nat. Hist. N. Y. F. X. Holzner.
16. Adult ♀ Exch. Campbell's Ranch, Laguna Mts., California. Am. Mus. Nat. Hist. N. Y. F. X. Holzner.
17. Adult ♂ P. Cuyamaca Mts., California. F. Stephens.
18–19. Adult ♀ Coll. Agness, Oregon. E. Heller.
20–23. Adult ♂ Coll. 30 miles west of Minaca, Mexico. G. F. Breninger.
24. Adult ♀ Coll. 30 miles west of Minaca, Mexico. G. F. Breninger.

a. Sciurus griseus nigripes (Bryant).

Sciurus fossor nigripes Bryant, Proc. Calif. Acad. Scien., 1889, p. 25.

Sciurus griseus nigripes Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 56. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 78. Zoöl. Ser.

BLACK-FOOTED GRAY SQUIRREL.

1–2. Adult ♂ P. San Antonio, California. J. Diefenbach.
2–5. Adult ♀ P. San Antonio, California. J. Diefenbach.
6. Adult ♀ P. Mt. Hamilton, California. W. W. Price.
7. Adult ♀ P. Carmel River, California. W. Greeley.
8–9. Adult ♂ P. Big Basin, headwaters of the Waddell River, California. G. A. Coleman.
10. Adult ♀ P. Big Basin, headwaters of the Waddell River, California. G. A. Coleman.

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11. Adult — P. Big Basin, headwaters of the Waddell River, California. G. A. Coleman.

Subgenus N. **Tamiasciurus.**

257. Sciurus hudsonius (Erxleben).

Sciurus vulgaris hudsonicus Erxl., Syst. Regn. Anim., 1777, p. 416.

Sciurus hudsonius Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 60, fig. 15. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 80. Zoöl. Ser.

HUDSON BAY CHICKAREE.

1–3. Adult ♀ Exch. Trousers Lake, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. J. Rowley.

4. Adult ♀ Exch. Gulquac Lake, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. J. Rowley.

5. Adult ♂ Coll. Dalhousie, New Brunswick, Canada. T. Surber.

6. Adult ♂ Exch. Forks of River Tobique, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. J. Rowley.

7. Adult ♀ Exch. Forks of River Tobique, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. J. Rowley.

8. Adult ♂ Coll. Murray Bay, Province of Quebec, Canada. T. Surber.

9. Adult ♂ Coll. Lake Edward, Province of Quebec, Canada. T. Surber.

10. Adult ♀ Coll. Lake Edward, Province of Quebec, Canada. T. Surber.

11–12. Adult ♂ Coll. Gravenhurst, Province of Ontario, Canada. L. Kenkel.

13–21. Adult ♀ Coll. Gravenhurst, Province of Ontario, Canada. L. Kenkel.

22. Adult ♀ Coll. Trout Creek, Province of Ontario, Canada. L. Kenkel.

23. Adult ♀ P. Lone Park, Wyoming. E. Thompson Seton.

24. Adult ♂ Coll. Dowagiac, Michigan. L. Pray.

25. Adult ♀ Coll. Dowagiac, Michigan. L. Pray.

a. Sciurus hudsonius loquax Bangs.

Sciurus hudsonicus loquax Bangs, Proc. Biol. Soc. Wash., X, 1896, p. 161.

Sciurus hudsonius loquax Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 62. Zoöl. Ser. *Id.* Check-L. Mamm. N.

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Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 80. Zoöl. Ser.

NOISY CHICKAREE.

1. Adult ♂ Exch. Syracuse, N. Y. Am. Mus. Nat. Hist. N. Y. M. M. Green.
2. Adult ♀ Exch. South Nyack, N. Y. Am. Mus. Nat. Hist. N. Y. C. L. Brownell.
3–5. Adult ♀ Exch. Cornwall, N. Y. Am. Mus. Nat. Hist. N. Y. C. Allen.
6. Adult ♂ Exch. Alder Creek, N. Y. Am. Mus. Nat. Hist. N. Y. M. M. Green.
7. Adult ♀ Exch. Alder Creek, N. Y. Am. Mus. Nat. Hist. N. Y. M. M. Green.
8–11. Adult ♂ Exch. Hastings, N. Y. Am. Mus. Nat. Hist. N. Y. J. Rowley.
12–14. Adult ♀ Exch. Hastings, N. Y. Am. Mus. Nat. Hist. N. Y. J. Rowley.
15. Adult ♂ Coll. White Sulphur Springs, W. Virginia. T. Surber.
16–17. Adult ♀ Coll. White Sulphur Springs, W. Virginia. T. Surber.
18–19. Adult ♂ Coll. Black Mountain, W. Virginia. T. Surber.
20. Adult ♀ Coll. Top of Alleghany Mts., W. Virginia. T. Surber.
21–22. Adult — Pres. Hicksville, Ohio. H. Meek.
23. Adult ♂ Pres. Laporte, Indiana. C. M. Barber.
24. Adult ♀ Pres. Laporte, Indiana. C. M. Barber.
25. Adult — P. Knoxville, Iowa. G. K. Cherrie.
26. Adult ♂ P. Park Siding, Michigan. C. Brandler.
27–31. Adult ♀ P. Park Siding, Michigan. C. Brandler.
32–35. Adult ♂ P. Lake Murphy, Michigan. C. Brandler.
36. Adult — P. New York. Ward's Nat. Scien. Establ., Rochester, N. Y.

b. *Sciurus hudsonius gymnicus* Bangs.

Sciurus hudsonicus gymnicus Bangs, Proc. N. Engl. Zoöl. Club., I, 1899, p. 28.

Sciurus hudsonius gymnicus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 61. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 80. Zoöl. Ser.

EASTERN CHICKAREE.

1. Adult ♂ Exch. South Twin Lake, Maine. Am. Mus. Nat. Hist. N. Y. J. Rowley.

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2. Adult ♂ P. Georget, Prince Edward Island, Canada. R. T. Young.
3. Adult ♀ P. Georget, Prince Edward Island, Canada. R. T. Young.

c. Sciurus hudsonius minnesota Allen.

Sciurus hudsonicus minnesota Allen, Amer. Nat., XXXIII, 1899, p. 640.

Sciurus hudsonius minnesota Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 62. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 81. Zoöl. Ser.

MINNESOTA CHICKAREE.

1. Adult ♂ Exch. Camp Douglas, Minn. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
2–3. Adult ♀ Exch. Camp Douglas, Minn. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
4–5. Adult ♂ Paratypes. Exch. Fort Snelling, Minn. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
6–7. Adult ♀ Paratypes. Exch. Fort Snelling, Minn. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
8. Adult ♂ Pres. Tomahawk Lake, Minn. H. T. Chace.

d. Sciurus hudsonius dakotensis Allen.

Sciurus hudsonicus dakotensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1894, p. 325.

Sciurus hudsonius dakotensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 62. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 81. Zoöl. Ser.

SOUTH DAKOTA CHICKAREE.

1. Adult ♀ Exch. Glendale, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
2. Adult ♀ Paratype. Exch. Squaw Creek, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

e. Sciurus hudsonius baileyi Allen.

Sciurus hudsonicus baileyi Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1898, p. 261.

Sciurus hudsonius baileyi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 63. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 81. Zoöl. Ser.

BAILEY'S CHICKAREE.

1–5. Adult ♂ P. Red Deer, Alberta, Canada. G. F. Dippie.

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6. Adult ♀ P. Red Deer, Alberta, Canada. G. F. Dippie.
7–8. Adult ♂ P. Canadian Nat. Park, N. W. Territory. G. F. Dippie.
9. Adult ♀ P. Canadian Nat. Park, N. W. Territory. G. F. Dippie.
10. Adult ♂ P. Beaver Lake, N. W. Territory. G. F. Dippie.
11. Adult ♂ P. Carpenter's Mt., Cariboo, Brit. Columbia, Canada. G. F. Dippie.
12. Adult ♀ P. Carpenter's Mt., Cariboo, Brit. Columbia, Canada. G. F. Dippie.

f. Sciurus hudsonius richardsoni (Bachman).

Sciurus richardsonii Bachm., Proc. Zoöl. Soc., 1838, p. 100.

Sciurus hudsonius richardsoni Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 64. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 82. Zoöl. Ser.

RICHARDSON'S CHICKAREE.

1–4. Adult — Pres. Petit Lake, Idaho. S. E. Meek.

g. Sciurus hudsonius petulans Osgood.

Sciurus hudsonicus petulans Osgood, N. Am. Faun., No. 19, 1900, p. 27.

Sciurus hudsonius petulans Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, Append., p. 426. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 82. Zoöl. Ser.

SCOLDING CHICKAREE.

1. Adult ♂ Topotype. Coll. White Pass, Alaska. D. G. Elliot.

h. Sciurus hudsonius vancouverensis Allen.

Sciurus hudsonicus vancouverensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 165.

Sciurus hudsonius vancouverensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 64. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 82. Zoöl. Ser.

VANCOUVER ISLAND CHICKAREE.

1. Adult ♂ Exch. Vancouver Island, Brit. Columbia, Canada. Am. Mus. Nat. Hist. N. Y. C. P. Streator.
2. Adult ♀ Pres. Fort Wrangel, Alaska. H. Pidgeon.
3–10. Adult ♂ P. Vancouver Island, Brit. Columbia, Canada. A. Forrer.
11–20. Adult ♀ P. Vancouver Island, Brit. Columbia, Canada. A. Forrer.

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21–22. Juv. ♂ P. Vancouver Island, Brit. Columbia, Canada. A. Forrer.

258. Sciurus douglasi Bachman.

Sciurus douglasii Bachm., Proc. Zoöl. Soc., 1838, p. 99. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 65. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 82. Zoöl. Ser.

DOUGLAS'S CHICKAREE.

1–8. Adult ♂ Coll. Johnson's Ranch, Elwah River, Clallam County, Washington. D. G. Elliot.
9. Adult ♀ Coll. Johnson's Ranch, Elwah River, Clallam County, Washington. D. G. Elliot.
10–23. Adult ♂ Coll. Boulder Creek, Elwah River, Clallam County, Washington. D. G. Elliot.
24–37. Adult ♀ Coll. Boulder Creek, Elwah River, Clallam County, Washington. D. G. Elliot.
38–40. Adult ♀ Coll. Boulder Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.
41–44. Adult ♂ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.
45–47. Adult ♀ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.
48–49. Adult ♂ Coll. Seattle, Washington. E. C. Starks.
50–56. Adult ♀ Coll. Gardiner, Oregon. E. Heller.
57. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
58. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.
59. Adult ♀ Coll. Marshfield, Oregon. E. Heller.
60–61. Adult ♂ Coll. Beaverton, Oregon. E. Heller.
62. Adult ♂ Coll. Chetco, Oregon. E. Heller.
63. Adult ♀ Coll. MacDonald's Ranch, Elwah River, Washington. D. G. Elliot.

a. Sciurus douglasi mollipilosus (Audubon & Bachman).

Sciurus mollipilosus Aud. & Bachm., Proc. Acad. Nat. Scien. Phil., 1841, p. 42.

Sciurus douglasi mollipilosus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 65. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 83. Zoöl. Ser.

SOFT-FURRED CHICKAREE.

1–3. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
4–6. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.
7. Adult ♂ P. Point Reyes, California. C. K. Worthern.

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8. Adult ♀ P. Point Reyes, California. C. K. Worthern.
9–10. Adult ♂ Coll. Requa, California. E. Heller.
11–13. Adult ♂ Coll. Mendocino, California. E. Heller.
14–15. Adult ♀ Coll. Mendocino, California. E. Heller.

b. Sciurus douglasi cascadensis Allen.

Sciurus douglasi cascadensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1898, p. 277. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 66. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 83. Zoöl. Ser.

CASCADE MOUNTAINS CHICKAREE.

1–2. Adult ♂ P. Logan, Oregon. C. K. Worthern.
3–4. Adult ♀ P. Logan, Oregon. C. K. Worthern.

c. Sciurus douglasi albolimbatus Allen.

Sciurus hudsonius californicus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 165. (nec Lesson.)

Sciurus douglasi albolimbatus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1898, p. 453. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 66. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 83. Zoöl. Ser.

CALIFORNIA CHICKAREE.

1. Adult ♂ P. Red Point, California. W. W. Price.
2. Adult ♂ P. Bishop Creek, California. F. Stephens.
3. Adult ♂ P. Hermit Valley, California. W. W. Price.
4. Adult ♂ P. Pyramid Peak, California. W. W. Price.
5–6. Adult ♂ P. Silver Lake, California. W. W. Price.
7. Adult ♀ P. Echo Lake, California. W. W. Price.
8. Adult ♂ P. Woodfords, California. W. W. Price.
9. Adult ♀ P. Blue Cañon, California. C. A. Allen.
10. Adult ♀ P. Snow Mountains, California. J. Diefenbach.
11. Adult ♂ P. Chaparral, California. C. K. Worthern.
12. Adult ♀ P. Modoc County, California. H. Bidwell.
13–14. Adult ♂ Coll. Big Cottonwood Meadows, Mount Whitney, California. E. Heller.
15–16. Adult ♀ Coll. Big Cottonwood Meadows, Mount Whitney, California. E. Heller.
17. Adult ♂ Coll. Whitney Creek, Mount Whitney, California. E. Heller.
18. Adult ♂ Coll. Hot Springs, Long Cañon, Mount Whitney, California. E. Heller.
19–20. Adult ♂ Coll. Ramshaw Meadows, Mount Whitney, California. E. Heller.

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21. Adult ♀ Coll. Ramshaw Meadows, Mount Whitney, California. E. Heller.
22. Adult ♀ Coll. Whitney Meadows, Mount Whitney, California. E. Heller.
23. Adult ♂ Coll. Mount Whitney, California. E. Heller.
24. Adult ♂ P. Chaparral, California. E. Adams.

d. Sciurus douglasi mearnsi (Townsend).

Sciurus hudsonius mearnsi Towns., Proc. Biol. Soc. Wash., XI, 1897, p. 146.

Sciurus douglasi mearnsi Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 133, fig. 21. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 83. Zoöl. Ser.

MEARNS'S CHICKAREE.

1–2. Adult ♂ Coll. Vallecitos, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
3–4. Adult ♀ Coll. Vallecitos, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
5. Adult ♂ Coll. La Grulla, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
6. Adult ♀ Coll. La Grulla, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

259. Sciurus fremonti Audubon & Bachman.

Sciurus fremonti Aud. & Bachm., Quad. N. Am., III, 1853, p. 237. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 66. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 84. Zoöl. Ser.

FREMONT'S CHICKAREE.

1–3. Adult ♂ P. Nederland, Colorado. R. T. Young.
4–9. Adult ♀ P. Nederland, Colorado. R. T. Young.
10–11. Adult ♂ P. Boulder, Colorado. R. T. Young.
12. Adult ♀ P. Boulder, Colorado. R. T. Young.
13. Adult ♂ P. Eagle Creek, Montana. R. T. Young.
14. Adult ♀ P. Eagle Creek, Montana. R. T. Young.

a. Sciurus fremonti mogollonensis (Mearns).

Sciurus hudsonius mogollonensis Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1887–90, p. 277.

Sciurus fremonti mogollonensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 67. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 84. Zoöl. Ser.

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ARIZONA CHICKAREE.

1–4. Adult ♀ P. White Mountains, Arizona. B. C. Condit.
5. Adult ♀ P. Baker's Butte, Arizona. B. C. Condit.
6. Adult ♀ Exch. General Springs, Mogollon Mts., Arizona. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

b. Sciurus fremonti grahamensis (Allen).

Sciurus hudsonicus grahamensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1894, p. 350.

Sciurus fremonti grahamensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 67. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 85. Zoöl. Ser.

GRAHAM MOUNTAINS CHICKAREE.

1. Adult ♂ Paratype. Exch. Graham Mountains, Arizona. Am. Mus. Nat. Hist. N. Y. W. W. Price.

Genus 103. **Tamias. Chipmunks.**

Tamias Illig,. Prodr. Syst. Mamm. et Av., 1811, p. 83. Type *Sciurus striatus* Linnæus.

Tenotis Rafin., Am. Month. Mag., I, 1817, p. 362.

Tamia Less., Man. Mamm., 1827, p. 230.

Eutamias Trouess., Cat. Mamm. Viv. et Foss., Bull. Soc. Études Scien. Angers, X, 1880, pp. 86–87.

Subgenus A. **Eutamias.**

260. Tamias dorsalis Baird.

Tamias dorsalis Baird, Proc. Acad. Nat. Scien. Phil., 1855, p. 332. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 68, fig. 16. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 135. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 85. Zoöl. Ser.

Tamias quadrivittatus pallidus Coues & Yarr., in Wheeler's Rep. Geogr. Expl. & Surv. West of 100th Merid., V, 1876, p. 118.

GILA CHIPMUNK.

1–27. Adult ♂ P. Chiricahua Mts., Arizona. B. C. Condit.
28–53. Adult ♀ P. Chiricahua Mts., Arizona. B. C. Condit.
54. Adult ♀ P. Santa Catalina Mts., Arizona. B. C. Condit.
55. Adult ♀ P. Graham Mts., Arizona. L. Miller.

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56. Adult ♂ Coll. Minaca, Mexico. G. F. Breninger.
57–58. Adult ♀ Coll. Minaca, Mexico. G. F. Breninger.

261. Tamias townsendi Bachman.

Tamias townsendii Bachm., Jour. Acad. Nat. Scien. Phil., 1839, p. 68. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901. p. 69. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 86. Zoöl. Ser.

Tamias cooperi Baird, Proc. Acad. Nat. Scien. Phil., 1855, p. 334.

TOWNSEND'S CHIPMUNK.

1. Adult ♂ Exch. Mount Lebanon, British Columbia, Canada. Am. Mus. Nat. Hist. N. Y. C. P. Streator.
2. Adult ♀ Exch. Mount Lebanon, British Columbia, Canada. Am. Mus. Nat. Hist. N. Y. C. P. Streator.
3. Adult ♀ Exch. Pacific County, Washington. Am. Mus. Nat. Hist. N. Y. C. P. Streator.
4. Adult ♀ Exch. Kalama, Washington. Am. Mus. Nat. Hist. N. Y. C. P. Streator.
5–20. Adult ♂ Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.
21. Juv. ♂ Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.
22–39. Adult ♀ Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.
40–41. Juv. ♀ Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.
42–50. Adult ♂ Coll. Boulder Creek, Clallam County, Washington. D. G. Elliot.
51–53. Adult ♀ Coll. Boulder Creek, Clallam County, Washington. D. G. Elliot.
54–55. Adult ♂ Coll. Boulder Lake, Clallam County, Washington. D. G. Elliot.
56. Adult ♀ Coll. McDonald's Ranch, Clallam County, Washington. D. G. Elliot.
57–58. Adult ♂ Coll. Johnson's Ranch, Clallam County, Washington. D. G. Elliot.
59. Adult — P. Marion County, California. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Tamias townsendi hindsi (Gray).

Tamias hindsi Gray, Ann. Mag. Nat. Hist., 1st Ser., X, 1842, p. 264.

Tamias townsendi hindsii Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 70. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 86. Zoöl. Ser.

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HINDS'S CHIPMUNK.

1–10. Adult ♂ Topotypes. Coll. Nicasio, California. E. Heller.
11–26. Adult ♀ Topotypes. Coll. Nicasio, California. E. Heller.
27–30. Adult ♂ P. Big Basin, California. C. A. Coleman.
31–34. Adult ♀ P. Big Basin, California. C. A. Coleman.
35. Adult ♂ P. Snow Mts., California. W. W. Price.
36. Adult ♂ Coll. Point Reyes, California. E. Heller.
37–38. Adult ♀ Coll. . Point Reyes, California. E. Heller.
39. Adult — P. Big Trees, Santa Cruz Co., California. A. Forrer.

b. Tamias townsendi pricii (Allen).

Tamias pricei Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1895, p. 333.

Tamias townsendi pricei Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 70. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 87. Zoöl. Ser.

PRICE'S CHIPMUNK.

1–18. Adult ♂ Paratypes. P. Portola, California. J. Diefenbach.
19–31. Adult ♀ Paratypes. P. Portola, California. J. Diefenbach.

c. Tamias townsendi ochrogenys (Merriam).

Eutamias townsendii ochrogenys Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 206.

Tamias townsendi ochrogenys Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 71. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 87. Zoöl. Ser.

BUFF-CHEEKED CHIPMUNK.

1–5. Adult ♂ Topotypes. Coll. Mendocino, California. E. Heller.
6–14. Adult ♀ Topotypes. Coll. Mendocino, California. E. Heller.
15–17. Adult ♂ Coll. Eureka, California. E. Heller.
18–22. Adult ♀ Coll. Eureka, California. E. Heller.
23–31. Adult ♂ Coll. Requa, California. E. Heller.
32–34. Adult ♀ Coll. Requa, California. E. Heller.
35–40. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
41–43. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.
44. Adult ♂ Coll. Agness, Oregon. E. Heller.

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d. Tamias townsendi littoralis Elliot.

Tamias townsendi littoralis Elliot, Pub. Field Columb. Mus., III, 1903, p. 153. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 87. Zoöl. Ser.

COAST CHIPMUNK.

1–4. Adult ♂ Paratypes. Coll. Marshfield, Oregon. E. Heller.
5–10. Adult ♀ Type & paratypes. Coll. Marshfield, Oregon. E. Heller.
11–13. Adult ♂ Coll. Gardiner, Oregon. E. Heller.
14–15. Adult ♀ Coll. Gardiner, Oregon. E. Heller.
16. Adult ♂ Coll. Florence, Oregon. E. Heller.
17–18. Adult ♀ Coll. Florence, Oregon. E. Heller.
19. Adult ♀ Coll. Scottsburg, Oregon. E. Heller.

262. Tamias merriami (Allen).

Tamias asiaticus merriami Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1889, p. 176.

Tamias merriami Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 71. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 137. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 88. Zoöl. Ser.

MERRIAM'S CHIPMUNK.

1–8. Adult ♂ Coll. Mt. Pinos, Ventura County, California. E. Heller.
9–12. Adult ♀ Coll. Mt. Pinos, Ventura County, California. E. Heller.
13. Adult ♀ Paratype. Exch. San Bernardino Mts., California. Am. Mus. Nat. Hist. N. Y. F. Stephens.
14–15. Adult ♀ Exch. Smiths Mts., California. Am. Mus. Nat. Hist. N. Y. C. K. Worthern.
16. Adult ♂ Exch. Campbell's Ranch, San Diego Co., California. Am. Mus. Nat. Hist. N. Y. F. X. Holzner.
17. Adult ♀ Exch. Campbell's Ranch, San Diego Co., California. Am. Mus. Nat. Hist. N. Y. F. X. Holzner.
18. Adult ♀ Coll. Castac Lake, Fort Tejon, California. E. Heller.

263. Tamias obscurus Allen.

Tamias obscurus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 70. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 136, figs. 22, XXX. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 88. Zoöl. Ser.

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FIG. XXVII. TAMIAS OBSCURUS. LOWER CALIFORNIA CHIPMUNK.

LOWER CALIFORNIA CHIPMUNK.

1. Adult ♂ Exch. San Pedro Martir Mts., Lower California, Mexico. Am. Mus. Nat. Hist. N. Y. E. C. Thurber.
4–5. Adult ♀ Exch. San Pedro Martir Mts., Lower California, Mexico. Am. Mus. Nat. Hist. N. Y. A. W. Anthony.
6–8. Adult ♂ Coll. La Grulla, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
9–14. Adult ♀ Coll. La Grulla, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
15–16. Adult ♂ Coll. Hanson Lagoon, Hanson Laguna Mts., Lower California, Mexico. E. Heller.
17–18. Adult ♀ Coll. Santa Rosa, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
19. Adult ♂ Coll. Vallecitos, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
20–25. Adult ♀ Coll. Vallecitos, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
26–31. Adult ♂ Coll. Santa Eulalia, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
32–39. Adult ♀ Coll. Santa Eulalia, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
40. Adult ♂ Coll. Rosarito Divide, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
41. Adult ♀ Coll. Rosarito Divide, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
42. Adult ♀ Coll. Aguaje da las Fresas, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

264. Tamias nexus Elliot.

Tamias nexus Elliot, Proc. Biol. Soc. Wash., XVIII, 1905, p. 233.

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ALLIED CHIPMUNK.

1–3. Adult ♂ Paratypes. Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

4–5. Adult ♀ Type & paratypes. Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

265. Tamias quadrimaculatus Gray.

Tamias quadrimaculatus Gray, Ann. Mag. Nat. Hist., 3rd Ser., XX, 1867, p. 435. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 71. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 88. Zoöl. Ser.

Tamias macrorhabdotes Merr., Proc. Biol. Soc. Wash., III, 1886, p. 25, fig. p. 26.

FOUR-BANDED CHIPMUNK.

1. Adult ♂ P. Quincy, California. F. Stephens.

2. Adult ♀ Exch. Red Point, California. Am. Mus. Nat. Hist. N. Y. W. W. Price.

3–6. Adult ♂ Exch. Blue Cañon, Placer County, California. Am. Mus. Nat. Hist. N. Y. C. A. Allen.

7. Adult ♀ Exch. Blue Cañon, Placer County, California. Am. Mus. Nat. Hist. N. Y. C. A. Allen.

8. Adult ♀ P. Chaparral, Butte County, California. C. K. Worthern.

9. Adult ♂ P. Modoc County, California. H. Bidwell.

10. Adult ♂ P. Blue Cañon, Placer County, California. C. K. Worthern.

11. Adult ♀ P. Blue Cañon, Placer County, California. C. K. Worthern.

12–16. Adult ♂ P. Bear Valley, Mariposa County, California. A. Forrer.

17–20. Adult ♀ P. Bear Valley, Mariposa County, California. A. Forrer.

21–22. Juv. ♂ P. Bear Valley, California. A. Forrer.

266. Tamias senex Allen.

Tamias senex Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 83. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 72. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 89. Zoöl. Ser.

GRAY CHIPMUNK.

1. Adult ♂ P. Hermit Valley, California. W. W. Price.

2–5. Adult ♀ P. Hermit Valley, California. W. W. Price.

6. Adult ♂ P. Bloods, Alpine County, California. W. W. Price.

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7–8. Adult ♀ P. Bloods, Alpine County, California. W. W. Price.
9–11. Adult ♂ P. Woodfords, Alpine County, California. W. W. Price.
12. Adult ♀ P. Woodfords, Alpine County, California. W. W. Price.
13–14. Adult ♂ P. Pyramid Peak, Eldorado County, California. W. W. Price.
15–19. Adult ♀ P. Pyramid Peak, Eldorado County, California. W. W. Price.
20–22. Adult ♂ P. Silver Lake, Amador County, California. W. W. Price.
23–26. Adult ♀ P. Silver Lake, Amador County, California. W. W. Price.
27. Adult ♀ P. Blue Lake, Humboldt County, California. W. W. Price.
28. Adult ♂ P. Chaparral, Butte County, California. E. Adams.
29. Adult ♀ P. Willow Creek Valley, Lassen County, California. E. Adams.

267. Tamias speciosus Allen.

Tamias speciosus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 86. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 72. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 89. Zoöl. Ser.

SHOWY CHIPMUNK.

1–19. Adult ♂ Coll. Bear Valley, San Bernardino Mts., California. E. Heller.
20–30. Adult ♀ Coll. Bear Valley, San Bernardino Mts., California. E. Heller.
31. Adult ♂ P. San Jacinto Mts., California. F. Stephens.
32. Adult ♀ Exch. San Bernardino Mts., California. Am. Mus. Nat. Hist. N. Y. F. Stephens.

a. Tamias speciosus inyoensis (Merriam).

Eutamias speciosus inyoensis Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 208.

Tamias callipeplus inyoensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 73. Zoöl. Ser.

Tamias speciosus inyoensis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 89. Zoöl. Ser.

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INYO MOUNTAINS CHIPMUNK.

1. Adult ♂ Coll. Inyo Mountains, summits E. of Lone Pine, California. E. Heller.
2. Adult ♀ Coll. Inyo Mountains, summits E. of Lone Pine, California. E. Heller.

268. Tamias frater Allen.

Tamias frater Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 88. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 73. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 90. Zoöl. Ser.

RELATED CHIPMUNK.

1–4. Adult ♂ Coll. Monache Meadows, Mt. Whitney, California. E. Heller.
5–6. Adult ♀ Coll. Monache Meadows, Mt. Whitney, California. E. Heller.
7–8. Adult ♀ Coll. Big Cottonwood Lakes, Mt. Whitney, California. E. Heller.
9. Adult ♀ Coll. Hot Springs, Mt. Whitney, California. E. Heller.
10–14. Adult ♂ Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.
15–17. Adult ♀ Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.
18–20. Adult ♂ Coll. Whitney Creek, Mt. Whitney, California. E. Heller.
21–22. Adult ♀ Coll. Whitney Creek, Mt. Whitney, California. E. Heller.
23. Adult ♂ P. Echo, Amador County, California. W. W. Price.
24–27. Juv. ♂ P. Echo, Amador County, California. W. W. Price.
28. Adult ♀ P. Echo, Amador County, California. W. W. Price.
29–33. Adult ♂ P. Hermit Valley, Calaveras County, California. W. W. Price.
34–37. Juv. ♂ P. Hermit Valley, Calaveras County, California. W. W. Price.
38–41. Adult ♀ P. Hermit Valley, Calaveras County, California. W. W. Price.
42–49. Juv. ♀ P. Hermit Valley, Calaveras County, California. W. W. Price.

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50–65. Adult ♂ P. Silver Lake, Amador County, California. W. W. Price.
66–88. Adult ♀ P. Silver Lake, Amador County, California. W. W. Price.
89–91. Juv. ♀ P. Silver Lake, Amador County, California. W. W. Price.
92–94. Juv. ♂ P. Silver Lake, Amador County, California. W. W. Price.
95–96. Juv. ♂ P. Edgewood, Douglas County, Nevada. W. W. Price.
97–100. Juv. ♀ P. Edgewood, Douglas County, Nevada. W. W. Price.
101–102. Adult ♂ P. Bloods, Calaveras County, California. W. W. Price.
103–107. Adult ♀ P. Bloods, Calaveras County, California. W. W. Price.
108. Juv. ♂ P. Modoc County, California. W. W. Price.
109–110. Juv. ♀ P. Modoc County, California. W. W. Price.
111–113. Juv. ♂ P. Woodfords, Alpine County, California. W. W. Price.
114–116. Adult ♂ P. Blue Lake, Alpine County, California. W. W. Price.
117. Juv. ♂ P. Anderson's Ranch, Douglas County, Nevada. W. W. Price.
118. Juv. ♀ P. Anderson's Ranch, Douglas County, Nevada. W. W. Price.
119. Juv. ♀ P. Mt. Siegel, Nevada. W. W. Price.
120–125. Adult ♂ P. Pyramid Peak, Eldorado County, California. W. W. Price.
126–130. Juv. ♂ P. Pyramid Peak, Eldorado County, California. W. W. Price.
131–147. Adult ♀ P. Pyramid Peak, Eldorado County, California. W. W. Price.
148–149. Juv. ♀ P. Pyramid Peak, Eldorado County, California. W. W. Price.

269. Tamias panamintinus Merriam.

Tamias panamintinus Merr., Proc. Biol. Soc. Wash., VIII, 1893, p. 134. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 74. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 90. Zoöl. Ser.

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PANAMINT MOUNTAINS CHIPMUNK.

1–8. Adult ♂ Coll. Hannopee Cañon, Panamint Mts., California. E. Heller.

9–18. Adult ♀ Coll. Hannopee Cañon, Panamint Mts., California. E. Heller.

19–24. Adult ♂ Coll. Coal Kilns, Panamint Mts., California. E. Heller.

25–35. Adult ♀ Coll. Coal Kilns, Panamint Mts., California. E. Heller.

36–41. Adult ♂ Coll. Inyo Mountains, summits E. of Lone Pine, California. E. Heller.

42–47. Adult ♀ Coll. Inyo Mountains, summits E. of Lone Pine, California. E. Heller.

48–51. Adult ♂ Coll. Beveridge Cañon, Inyo Mountains, California. E. Heller.

52–56. Adult ♀ Coll. Beveridge Cañon, Inyo Mountains, California. E. Heller.

270. Tamias amœnus Allen.

Tamias amœnus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 90. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 74. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 90. Zoöl. Ser.

CHARMING CHIPMUNK.

1. Adult ♂ P. Hermit Valley, Calaveras County, California. W. W. Price.

2–4. Adult ♀ P. Hermit Valley, Calaveras County, California. W. W. Price.

5–9. Adult ♂ P. Pyramid Peak, Eldorado County, California. W. W. Price.

10–24. Adult ♀ P. Pyramid Peak, Eldorado County, California. W. W. Price.

25–30. Adult ♂ P. Silver Lake, Amador County, California. W. W. Price.

31–32. Adult ♀ P. Silver Lake, Amador County, California. W. W. Price.

33. Adult ♂ P. Woodfords, Alpine County, California. W. W. Price.

34. Adult ♂ P. Lassen Creek, S. E. of Lancaster, California. W. W. Price.

271. Tamias caurinus (Merriam).

Eutamias caurinus Merr., Proc. Acad. Nat. Scien. Phil., 1898, p. 352.

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Tamias caurinus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 74. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 90. Zoöl. Ser.

NORTHWEST CHIPMUNK.

1–19. Adult ♂ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

20–24. Juv. ♂ Coll. Happy Lake, Olympic Mts., Clallam Co., Washington. D. G. Elliot.

25–35. Adult ♀ Coll. Happy Lake, Olympic Mts., Clallam Co., Washington. D. G. Elliot.

36–37. Juv. ♀ Coll. Happy Lake, Olympic Mts., Clallam Co., Washington. D. G. Elliot.

38–40. Adult ♂ Coll. Boulder Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

41–46. Adult ♀ Coll. Boulder Lake, Olympic Mts., Clallam Co., Washington. D. G. Elliot.

272. Tamias cinereicollis Allen.

Tamias cinereicollis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 94. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 75. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 90. Zoöl. Ser.

ASH-COLORED CHIPMUNK.

1–15. Adult ♂ P. White Mountains, Arizona. W. W. Price.

16–24. Adult ♀ P. White Mountains, Arizona. W. W. Price.

25–28. Adult — P. White Mountains, Arizona. W. W. Price.

273. Tamias quadrivittatus (Say).

Sciurus quadrivittatus Say, Long's Exped. Rocky Mts., II, 1823, p. 45.

Tamias quadrivittatus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 75. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 138. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 91. Zoöl. Ser.

COLORADO CHIPMUNK.

1–6. Adult ♂ Exch. Florida, La Plata County, Colorado. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

7–10. Adult ♀ Exch. Florida, La Plata County, Colorado. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

11. Adult ♂ Exch. Colorado Springs, Colorado. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

12–13. Adult ♂ Exch. Three Forks, N. Western Colorado. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

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14. Adult ♀ Exch. Three Forks, N. Western Colorado. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
15. Adult ♂ Exch. Sherman, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
16. Adult ♀ Exch. Sherman, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
17–18. Adult ♂ Exch. Rockwell, Colorado. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
19. Adult ♀ Exch. Rockwell, Colorado. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
20–24. Adult ♂ P. Boulder, Boulder County, Colorado. R. T. Young.
25–30. Adult ♀ P. Boulder, Boulder County, Colorado. R. T. Young.
31. Adult ♀ P. Silver Lake, Boulder County, Colorado. R. T. Young.
32. Adult ♀ P. Nederland, Boulder County, Colorado. R. T. Young.
33–34. Adult ♂ P. Cuidad, State of Durango, Mexico. A. Forrer.

a. Tamias quadrivittatus luteiventris Allen.

Tamias quadrivittatus luteiventris Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 101. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 76. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 92. Zoöl. Ser.

BUFF-BELLIED CHIPMUNK.

1–3. Adult ♂ P. Eagle Creek, Montana. E. Thompson Seton.
4–5. Adult ♀ P. Eagle Creek, Montana. E. Thompson Seton.
6. Adult ♂ P. Yancey, Yellowstone National Park. E. Thompson Seton.

b. Tamias quadrivittatus felix Rhoads.

Tamias quadrivittatus felix Rhoads, Amer. Nat., XXIX, 1895, p. 941. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 76. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 92. Zoöl. Ser.

HAPPY CHIPMUNK.

1. Adult ♂ P. Mount Baker Range, British Columbia, Canada. C. K. Worthern.
2. Adult ♀ P. Mount Baker Range, British Columbia, Canada. C. K. Worthern.

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c. Tamias quadrivittatus affinis Allen.

Tamias quadrivittatus affinis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 103. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 77. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 92. Zoöl. Ser.

ALLIED CHIPMUNK.

1–2. Adult ♂ Paratypes. Exch. Ashcroft, British Columbia, Canada. Am. Mus. Nat. Hist. N. Y. C. P. Streator.

d. Tamias quadrivittatus borealis (Allen).

Tamias asiaticus borealis Allen, Mon. N. Am. Rod., 1877, p. 793.

Tamias quadrivittatus borealis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 77. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 92. Zoöl. Ser.

NORTHERN CHIPMUNK.

1–4. Adult ♀ Exch. Glendale, S. Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

5–8. Adult ♂ P. Canadian Nat. Park, Alberta, Canada. G. F. Dippie.

9–11. Adult ♀ P. Canadian Nat. Park, Alberta, Canada. G. F. Dippie.

12. Adult ♂ P. Banff, Alberta, Canada. G. F. Dippe.

13. Adult ♂ P. Cariboo, British Columbia, Canada. C. K. Worthern.

14. Adult ♀ P. Cariboo, British Columbia, Canada. C. K. Worthern.

e. Tamias quadrivittatus neglectus Allen.

Tamias quadrivittatus neglectus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 106. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 78. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 92. Zoöl. Ser.

NEGLECTED CHIPMUNK.

1–6. Adult ♂ P. Park Siding, Michigan. C. Brandler.

7–12. Adult ♀ P. Park Siding, Michigan. C. Brandler.

13. Adult ♂ P. Seney, Schoolcraft County, Michigan. T. Surber.

14. Adult ♂ P. Knoxville, Iowa. G. K. Cherrie.

15. Adult ♂ Exch. Camp Douglas, Wisconsin. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

16–17. Juv. ♂ Exch. Camp Douglas, Wisconsin. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

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18–19. Adult ♀ Exch. Camp Douglas, Wisconsin. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

20–22. Juv. ♀ Exch. Camp Douglas, Wisconsin. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

274. Tamias hopiensis (Merriam).

Tamias quadrivittatus gracilis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 76. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 91. Zoöl. Ser. (nec Allen.)

Eutamias hopiensis Merr., Proc. Biol. Soc. Wash., XVIII, 1905, p. 165.

HOPI CHIPMUNK.

1. Adult ♂ Exch. Bluff City, Utah. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

2. Adult ♀ Exch. Bluff City, Utah. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

275. Tamias minimus Bachman.

Tamias minimus Bachm., Jour. Acad. Nat. Scien. Phil., 1839, p. 71. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 78. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 93. Zoöl. Ser.

LEAST CHIPMUNK.

1. Adult ♂ Exch. Pine Ridge Indian Reserv., S. Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

2. Adult ♀ Exch. Pine Ridge Indian Reserv., S. Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

a. Tamias minimus consobrinus Allen.

Tamias asiaticus var. *pallidus* Allen, Mon. N. Am. Rod., 1877, p. 793. (Part.)

Tamias minimus consobrinus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 112. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 78. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 93. Zoöl. Ser.

RELATED CHIPMUNK.

1. Adult ♀ Exch. Aurora, Carbon County, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

2–5. Adult ♀ Exch. Bitter Creek, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

6. Adult ♂ P. Billings, Montana. E. Thompson Seton.

7. Adult ♀ P. Billings, Montana. E. Thompson Seton.

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b. Tamias minimus pictus Allen.

Tamias minimus pictus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 115. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 79. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 94. Zoöl. Ser.

PAINTED CHIPMUNK.

1–6. Adult ♂ P. Mount Siegel, Nevada. W. W. Price.
7–8. Juv. ♂ P. Mount Siegel, Nevada. W. W. Price.
9–12. Adult ♀ P. Mount Siegel, Nevada. W. W. Price.
13–14. Adult — Pres. Petit Lake, Idaho. S. E. Meek.
15. Adult ♀ P. Bunch Grass Spring, Madeline Plains, Modoc County, California. F. Stephens.

c. Tamias minimus alpinus (Merriam).

Tamias alpinus Merr., Proc. Biol. Soc. Wash., VIII, 1893, p. 137.

Tamias minimus alpinus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 79. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 94. Zoöl. Ser.

ALPINE CHIPMUNK.

1–3. Adult ♂ Coll. Whitney Creek, Mt. Whitney, California. E. Heller.
4–6. Adult ♀ Coll. Whitney Creek, Mt. Whitney, California. E. Heller.
7–13. Adult ♂ Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.
14–16. Adult ♀ Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.
17–21. Adult ♂ Coll. Whitney Meadows, Mt. Whitney, California. E. Heller.
22–23. Adult ♀ Coll. Whitney Meadows, Mt. Whitney, California. E. Heller.
24–26. Adult ♂ Coll. Old Mount Whitney, California. E. Heller.

Subgenus B. **Tamias.**

276. Tamias striatus (Linnæus).

Sciurus striatus Linn., Syst. Nat., I, 1758, p. 64.

Sciurus americanus Gmel., Syst. Nat., I, 1788, p. 150.

Tamias striatus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 80. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 95. Zoöl. Ser.

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STRIPED CHIPMUNK.

1. Adult ♂ Exch. Hastings, New York. Am. Mus. Nat. Hist. N. Y. W. M. Richardson.
2. Adult ♀ Exch. Hastings, New York. Am. Mus. Nat. Hist. N. Y. J. Rowley.
3. Adult — Exch. Cornwall, New York. Am. Mus. Nat. Hist. N. Y. C. A. Allen.
4. Adult — P. Tamarack Swamp, Pennsylvania. T. Surber.
5. Adult ♀ Exch. Newton, New Jersey. Am. Mus. Nat. Hist. N. Y. G. Lewis.
6. Adult — Exch. Hiskatom, New Jersey. Am. Mus. Nat. Hist. N. Y. L. L. Foster.

7–10. Adult ♂ P. White Sulphur Springs, West Virginia. T. Surber.

11. Juv. ♂ P. White Sulphur Springs, West Virginia. T. Surber.

12–14. Adult ♀ P. White Sulphur Springs, West Virginia. T. Surber.

15. Juv. ♀ P. Black Mountain Springs, West Virginia. T. Surber.
16. Adult ♂ Pres. Hicksville, Ohio. S. E. Meek.
17. Adult ♂ P. Cedar Rapids, Iowa. G. K. Cherrie.

18–19. Adult ♀ Coll. Gravenhurst, Ontario, Canada. L. Kenkel.

20–21. Adult ♂ Exch. Weaverville, North Carolina. Am. Mus. Nat. Hist. N. Y. J. S. Cairns.

22–24. Adult ♀ Exch. Weaverville, North Carolina. Am. Mus. Nat. Hist. N. Y. J. S. Cairns.

25. Adult — P. New York. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Tamias striatus lysteri (Richardson).

Sciurus (*Tamias*) *lysteri* Richard., Faun. Bor. Amer., Mamm., I, 1829, p. 181, pl. 15.

Tamias striatus lysteri Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 80. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 95. Zoöl. Ser.

LYSTER'S STRIPED CHIPMUNK.

1. Adult ♂ Exch. Stamford, Connecticut. Am. Mus. Nat. Hist. N. Y. C. A. Smith.
2. Adult ♀ Exch. Stamford, Connecticut. Am. Mus. Nat. Hist. N. Y. W. Dutcher.

3–4. Adult ♂ Exch. Rutland, Vermont. Am. Mus. Nat. Hist. N. Y. W. M. Richardson.

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5. Adult ♂ Exch. Tobique Point, New Brunswick. Am. Mus. Nat. Hist. N. Y. J. Rowley.
6. Adult ♀ Exch. Tobique Point, New Brunswick. Am. Mus. Nat. Hist. N. Y. J. Rowley.
7–15. Adult ♂ Coll. Murray Bay, Prov. Quebec, Canada. T. Surber.
16–20. Adult ♀ Coll. Murray Bay, Prov. Quebec, Canada. T. Surber.
21–24. Adult ♂ Coll. Trout Creek, Prov. Ontario, Canada. L. Kenkel.
25–26. Adult ♂ P. Branchton, Prov. Ontario, Canada. G. F. Dippie.
27. Adult ♀ P. Branchton, Prov. Ontario, Canada. G. F. Dippie.
28–30. Adult ♀ Exch. Linwood, Prov. Ontario, Canada. Am. Mus. Nat. Hist. N. Y. S. E. Atkinson.
31. Juv. ♀ Exch. Linwood, Prov. Ontario, Canada. Am. Mus. Nat. Hist. N. Y. S. E. Atkinson.
32–35. Adult ♂ Coll. Gravenhurst, Prov. Ontario, Canada. L. Kenkel.
36–39. Adult ♀ Coll. Gravenhurst, Prov. Ontario, Canada. L. Kenkel.
40–42. Adult — Coll. Gravenhurst, Prov. Ontario, Canada. S. E. Meek.
43. Adult ♀ Pres. Laporte, Indiana. C. M. Barber.
44. Adult ♀ Exch. South Twin Lake, Maine. Am. Mus. Nat. Hist. N. Y. J. Rowley.
45. Adult ♀ Coll. Fox Lake, Illinois. L. Pray.

b. Tamias striatus griseus Mearns.

Tamias striatus griseus Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 231. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 81. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 96. Zoöl. Ser.

GRAY STRIPED CHIPMUNK.

1–2. Adult ♂ P. Park Siding, Michigan. C. Brandler.
3. Adult ♂ P. Murphy Lake, Michigan. C. Brandler.
4–5. Adult ♂ Exch. Camp Douglas, Wisconsin. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
6–8. Adult ♂ Pres. Tomahawk Lake, Wisconsin. H. T. Chace.
9. Adult — Pres. Tomahawk Lake, Wisconsin. H. T. Chace.
10–11. Adult ♂ Paratypes. Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

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12–13. Adult ♀ Paratypes. Exch. Fort Snelling, Minnesota Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

Genus 104. **Citellus. Spermophiles.**

Citellus Oken, Lehrb. der Naturg., Zool., II, 1816, p. 842. Type *Mus citellus* Linnæus.

Spermophilus F. Cuv., Dents Mamm., 1825, pp. 160–161, pls. LV, 255.

Spermatophilus Wagl., Nat. Syst. Amphib., 1830, p. 22.

Citillus Lichten., Darst. neuer oder wenig bekannt. Säugeth., Heft. 5, 1827–34, Taf. XXXI, fig. 2.

Colobotis Brandt, Bull. Class. Phys.-Math. Acad. Imp. Scien. St. Pétersb., II, 1844, p. 365.

Otospermophilus Brandt, Bull. Class. Phys.-Math. Acad. Imp. Scien. St. Pétersb., II, 1844, p. 379.

Otocolobus Brandt, Bull. Class. Phys.-Math. Acad. Imp. Scien. St. Pétersb., II, 1844, p. 382.

Ictidomys Allen, Mon. N. Am. Rod., 1877, p. 821.

Spermophilopsis Blasius, Tag. 57ten Vers. Deut. Nat. Aerz., 1884, p. 324.

Ammospermophilus Merr., Proc. Biol. Soc. Wash., VII, 1892, p. 27.

Xerospermophilus Merr., Proc. Biol. Soc. Wash., VII, 1892, p. 27.

Callospermophilus Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 189. (note.)

Subgenus A. **Ammospermophilus.**

277. Citellus harrisi (Audubon & Bachman).

Spermophilus harrisii Aud. & Bach., Quad. N. Am., III, 1854, p. 267, pl. 144, fig. 1. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 85. Zoöl. Ser.

Citellus harrisi Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. 1, 1904, p. 141. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 96. Zoöl. Ser.

HARRIS'S SPERMOPHILE.

1–2. Adult ♂ Exch. Fort Verde, Arizona. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

3. Juv. ♀ Exch. Fort Verde, Arizona. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

4. Adult ♂ P. Fort Lowell, Arizona. Price & Condit.

5–6. Adult ♀ P. Fort Lowell, Arizona. Price & Condit.

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278. Citellus leucurus (Merriam).

Tamias leucurus Merr., N. Am. Faun., No. 2, 1889, p. 20.

Spermophilus leucurus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 86, fig. 18. Zoöl. Ser.

Citellus leucurus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 142. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 97. Zoöl. Ser.

WHITE-TAILED SPERMOPHILE.

1–7. Adult ♂ Coll. Palm Springs, California. E. Heller.
8–10. Adult ♀ Coll. Palm Springs, California. E. Heller.
11–15. Adult ♂ Coll. Daggett, California. E. Heller.
16–19. Adult ♂ Coll. Whitewater, California. E. Heller.
20–24. Adult ♀ Coll. Whitewater, California. E. Heller.
25–26. Adult ♂ Coll. Morongo Pass, California. E. Heller.
27. Adult ♀ Coll. Morongo Pass, California. E. Heller.
28–30. Adult ♀ Coll. Lone Willow Springs, California. E. Heller.
31. Adult ♂ P. Hesperia, Lancaster Co., California. E. C. Thurber.
32. Adult ♀ P. Hesperia, Lancaster Co., California. E. C. Thurber.
33. Adult ♀ P. Borego Springs, California. F. Stephens.
34. Adult ♂ P. Aguanga, Riverside Co., California. F. Stephens.
35. Adult ♀ P. Walker's Pass, Kern Co., California. F. Stephens.
36–37. Juv. ♂ P. Candelaria, Nevada. J. Rowley.
38–40. Juv. ♀ P. Candelaria, Nevada. J. Rowley.
41–43. Adult ♂ Coll. San Matias Spring, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
44. Adult ♀ Coll. San Matias Spring, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
45–46. Adult ♀ Coll. Parral, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
47. Adult ♀ Coll. Trinidad, Lower California, Mexico. E. Heller.
48–50. Adult ♂ Coll. San Felipe, Lower California, Mexico. E. Heller.
51–53. Adult ♀ Coll. San Felipe, Lower California, Mexico. E. Heller.
54. Adult ♀ P. San Felipe Cañon, San Diego Co., California. F. Stephens.

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11. Adult — P. Big Basin, headwaters of the Waddell River, California. G. A. Coleman.

Subgenus N. **Tamiasciurus.**

257. Sciurus hudsonius (Erxleben).

Sciurus vulgaris hudsonicus Erxl., Syst. Regn. Anim., 1777, p. 416.

Sciurus hudsonius Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 60, fig. 15. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 80. Zoöl. Ser.

HUDSON BAY CHICKAREE.

1–3. Adult ♀ Exch. Trousers Lake, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. J. Rowley.

4. Adult ♀ Exch. Gulquac Lake, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. J. Rowley.

5. Adult ♂ Coll. Dalhousie, New Brunswick, Canada. T. Surber.

6. Adult ♂ Exch. Forks of River Tobique, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. J. Rowley.

7. Adult ♀ Exch. Forks of River Tobique, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. J. Rowley.

8. Adult ♂ Coll. Murray Bay, Province of Quebec, Canada. T. Surber.

9. Adult ♂ Coll. Lake Edward, Province of Quebec, Canada. T. Surber.

10. Adult ♀ Coll. Lake Edward, Province of Quebec, Canada. T. Surber.

11–12. Adult ♂ Coll. Gravenhurst, Province of Ontario, Canada. L. Kenkel.

13–21. Adult ♀ Coll. Gravenhurst, Province of Ontario, Canada. L. Kenkel.

22. Adult ♀ Coll. Trout Creek, Province of Ontario, Canada. L. Kenkel.

23. Adult ♀ P. Lone Park, Wyoming. E. Thompson Seton.

24. Adult ♂ Coll. Dowagiac, Michigan. L. Pray.

25. Adult ♀ Coll. Dowagiac, Michigan. L. Pray.

a. Sciurus hudsonius loquax Bangs.

Sciurus hudsonicus loquax Bangs, Proc. Biol. Soc. Wash., X, 1896, p. 161.

Sciurus hudsonius loquax Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 62. Zoöl. Ser. *Id.* Check-L. Mamm. N.

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Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 80. Zoöl. Ser.

NOISY CHICKAREE.

1. Adult ♂ Exch. Syracuse, N. Y. Am. Mus. Nat. Hist. N. Y. M. M. Green.
2. Adult ♀ Exch. South Nyack, N. Y. Am. Mus. Nat. Hist. N. Y. C. L. Brownell.
3–5. Adult ♀ Exch. Cornwall, N. Y. Am. Mus. Nat. Hist. N. Y. C. Allen.
6. Adult ♂ Exch. Alder Creek, N. Y. Am. Mus. Nat. Hist. N. Y. M. M. Green.
7. Adult ♀ Exch. Alder Creek, N. Y. Am. Mus. Nat. Hist. N. Y. M. M. Green.
8–11. Adult ♂ Exch. Hastings, N. Y. Am. Mus. Nat. Hist. N. Y. J. Rowley.
12–14. Adult ♀ Exch. Hastings, N. Y. Am. Mus. Nat. Hist. N. Y. J. Rowley.
15. Adult ♂ Coll. White Sulphur Springs, W. Virginia. T. Surber.
16–17. Adult ♀ Coll. White Sulphur Springs, W. Virginia. T. Surber.
18–19. Adult ♂ Coll. Black Mountain, W. Virginia. T. Surber.
20. Adult ♀ Coll. Top of Alleghany Mts., W. Virginia. T. Surber.
21–22. Adult — Pres. Hicksville, Ohio. H. Meek.
23. Adult ♂ Pres. Laporte, Indiana. C. M. Barber.
24. Adult ♀ Pres. Laporte, Indiana. C. M. Barber.
25. Adult — P. Knoxville, Iowa. G. K. Cherrie.
26. Adult ♂ P. Park Siding, Michigan. C. Brandler.
27–31. Adult ♀ P. Park Siding, Michigan. C. Brandler.
32–35. Adult ♂ P. Lake Murphy, Michigan. C. Brandler.
36. Adult — P. New York. Ward's Nat. Scien. Establ., Rochester, N. Y.

b. Sciurus hudsonius gymnicus Bangs.

Sciurus hudsonicus gymnicus Bangs, Proc. N. Engl. Zoöl. Club., I, 1899, p. 28.

Sciurus hudsonius gymnicus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 61. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 80. Zoöl. Ser.

EASTERN CHICKAREE.

1. Adult ♂ Exch. South Twin Lake, Maine. Am. Mus. Nat. Hist. N. Y. J. Rowley.

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2. Adult ♂ P. Georget, Prince Edward Island, Canada. R. T. Young.
3. Adult ♀ P. Georget, Prince Edward Island, Canada. R. T. Young.

c. Sciurus hudsonius minnesota Allen.

Sciurus hudsonicus minnesota Allen, Amer. Nat., XXXIII, 1899, p. 640.

Sciurus hudsonius minnesota Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 62. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 81. Zoöl. Ser.

MINNESOTA CHICKAREE.

1. Adult ♂ Exch. Camp Douglas, Minn. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
2–3. Adult ♀ Exch. Camp Douglas, Minn. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
4–5. Adult ♂ Paratypes. Exch. Fort Snelling, Minn. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
6–7. Adult ♀ Paratypes. Exch. Fort Snelling, Minn. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
8. Adult ♂ Pres. Tomahawk Lake, Minn. H. T. Chace.

d. Sciurus hudsonius dakotensis Allen.

Sciurus hudsonicus dakotensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1894, p. 325.

Sciurus hudsonius dakotensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 62. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 81. Zoöl. Ser.

SOUTH DAKOTA CHICKAREE.

1. Adult ♀ Exch. Glendale, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
2. Adult ♀ Paratype. Exch. Squaw Creek, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

e. Sciurus hudsonius baileyi Allen.

Sciurus hudsonicus baileyi Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1898, p. 261.

Sciurus hudsonius baileyi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 63. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 81. Zoöl. Ser.

BAILEY'S CHICKAREE.

1–5. Adult ♂ P. Red Deer, Alberta, Canada. G. F. Dippie.

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6. Adult ♀ P. Red Deer, Alberta, Canada. G. F. Dippie.
7–8. Adult ♂ P. Canadian Nat. Park, N. W. Territory. G. F. Dippie.
9. Adult ♀ P. Canadian Nat. Park, N. W. Territory. G. F. Dippie.
10. Adult ♂ P. Beaver Lake, N. W. Territory. G. F. Dippie.
11. Adult ♂ P. Carpenter's Mt., Cariboo, Brit. Columbia, Canada. G. F. Dippie.
12. Adult ♀ P. Carpenter's Mt., Cariboo, Brit. Columbia, Canada. G. F. Dippie.

f. Sciurus hudsonius richardsoni (Bachman).

Sciurus richardsonii Bachm., Proc. Zoöl. Soc., 1838, p. 100.

Sciurus hudsonius richardsoni Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 64. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 82. Zoöl. Ser.

RICHARDSON'S CHICKAREE.

1–4. Adult — Pres. Petit Lake, Idaho. S. E. Meek.

g. Sciurus hudsonius petulans Osgood.

Sciurus hudsonicus petulans Osgood, N. Am. Faun., No. 19, 1900, p. 27.

Sciurus hudsonius petulans Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, Append., p. 426. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 82. Zoöl. Ser.

SCOLDING CHICKAREE.

1. Adult ♂ Topotype. Coll. White Pass, Alaska. D. G. Elliot.

h. Sciurus hudsonius vancouverensis Allen.

Sciurus hudsonicus vancouverensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 165.

Sciurus hudsonius vancouverensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 64. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 82. Zoöl. Ser.

VANCOUVER ISLAND CHICKAREE.

1. Adult ♂ Exch. Vancouver Island, Brit. Columbia, Canada. Am. Mus. Nat. Hist. N. Y. C. P. Streator.
2. Adult ♀ Pres. Fort Wrangel, Alaska. H. Pidgeon.
3–10. Adult ♂ P. Vancouver Island, Brit. Columbia, Canada. A. Forrer.
11–20. Adult ♀ P. Vancouver Island, Brit. Columbia, Canada. A. Forrer.

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21–22. Juv. ♂ P. Vancouver Island, Brit. Columbia, Canada. A. Forrer.

258. Sciurus douglasi Bachman.

Sciurus douglasii Bachm., Proc. Zoöl. Soc., 1838, p. 99. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 65. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 82. Zoöl. Ser.

DOUGLAS'S CHICKAREE.

1–8. Adult ♂ Coll. Johnson's Ranch, Elwah River, Clallam County, Washington. D. G. Elliot.
9. Adult ♀ Coll. Johnson's Ranch, Elwah River, Clallam County, Washington. D. G. Elliot.
10–23. Adult ♂ Coll. Boulder Creek, Elwah River, Clallam County, Washington. D. G. Elliot.
24–37. Adult ♀ Coll. Boulder Creek, Elwah River, Clallam County, Washington. D. G. Elliot.
38–40. Adult ♀ Coll. Boulder Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.
41–44. Adult ♂ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.
45–47. Adult ♀ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.
48–49. Adult ♂ Coll. Seattle, Washington. E. C. Starks.
50–56. Adult ♀ Coll. Gardiner, Oregon. E. Heller.
57. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
58. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.
59. Adult ♀ Coll. Marshfield, Oregon. E. Heller.
60–61. Adult ♂ Coll. Beaverton, Oregon. E. Heller.
62. Adult ♂ Coll. Chetco, Oregon. E. Heller.
63. Adult ♀ Coll. MacDonald's Ranch, Elwah River, Washington. D. G. Elliot.

a. Sciurus douglasi mollipilosus (Audubon & Bachman).

Sciurus mollipilosus Aud. & Bachm., Proc. Acad. Nat. Scien. Phil., 1841, p. 42.

Sciurus douglasi mollipilosus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 65. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 83. Zoöl. Ser.

SOFT-FURRED CHICKAREE.

1–3. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
4–6. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.
7. Adult ♂ P. Point Reyes, California. C. K. Worthern.

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8. Adult ♀ P. Point Reyes, California. C. K. Worthern.
9–10. Adult ♂ Coll. Requa, California. E. Heller.
11–13. Adult ♂ Coll. Mendocino, California. E. Heller.
14–15. Adult ♀ Coll. Mendocino, California. E. Heller.

b. Sciurus douglasi cascadensis Allen.

Sciurus douglasi cascadensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1898, p. 277. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 66. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 83. Zoöl. Ser.

CASCADE MOUNTAINS CHICKAREE.

1–2. Adult ♂ P. Logan, Oregon. C. K. Worthern.
3–4. Adult ♀ P. Logan, Oregon. C. K. Worthern.

c. Sciurus douglasi albolimbatus Allen.

Sciurus hudsonius californicus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 165. (nec Lesson.)

Sciurus douglasi albolimbatus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1898, p. 453. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 66. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 83. Zoöl. Ser.

CALIFORNIA CHICKAREE.

1. Adult ♂ P. Red Point, California. W. W. Price.
2. Adult ♂ P. Bishop Creek, California. F. Stephens.
3. Adult ♂ P. Hermit Valley, California. W. W. Price.
4. Adult ♂ P. Pyramid Peak, California. W. W. Price.
5–6. Adult ♂ P. Silver Lake, California. W. W. Price.
7. Adult ♀ P. Echo Lake, California. W. W. Price.
8. Adult ♂ P. Woodfords, California. W. W. Price.
9. Adult ♀ P. Blue Cañon, California. C. A. Allen.
10. Adult ♀ P. Snow Mountains, California. J. Diefenbach.
11. Adult ♂ P. Chaparral, California. C. K. Worthern.
12. Adult ♀ P. Modoc County, California. H. Bidwell.
13–14. Adult ♂ Coll. Big Cottonwood Meadows, Mount Whitney, California. E. Heller.
15–16. Adult ♀ Coll. Big Cottonwood Meadows, Mount Whitney, California. E. Heller.
17. Adult ♂ Coll. Whitney Creek, Mount Whitney, California. E. Heller.
18. Adult ♂ Coll. Hot Springs, Long Cañon, Mount Whitney, California. E. Heller.
19–20. Adult ♂ Coll. Ramshaw Meadows, Mount Whitney, California. E. Heller.

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56. Adult ♂ Coll. Minaca, Mexico. G. F. Breninger.
57–58. Adult ♀ Coll. Minaca, Mexico. G. F. Breninger.

261. Tamias townsendi Bachman.

Tamias townsendii Bachm., Jour. Acad. Nat. Scien. Phil., 1839, p. 68. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 69. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 86. Zoöl. Ser.

Tamias cooperi Baird, Proc. Acad. Nat. Scien. Phil., 1855, p. 334.

TOWNSEND'S CHIPMUNK.

1. Adult ♂ Exch. Mount Lebanon, British Columbia, Canada. Am. Mus. Nat. Hist. N. Y. C. P. Streator.
2. Adult ♀ Exch. Mount Lebanon, British Columbia, Canada. Am. Mus. Nat. Hist. N. Y. C. P. Streator.
3. Adult ♀ Exch. Pacific County, Washington. Am. Mus. Nat. Hist. N. Y. C. P. Streator.
4. Adult ♀ Exch. Kalama, Washington. Am. Mus. Nat. Hist. N. Y. C. P. Streator.
5–20. Adult ♂ Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.
21. Juv. ♂ Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.
22–39. Adult ♀ Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.
40–41. Juv. ♀ Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.
42–50. Adult ♂ Coll. Boulder Creek, Clallam County, Washington. D. G. Elliot.
51–53. Adult ♀ Coll. Boulder Creek, Clallam County, Washington. D. G. Elliot.
54–55. Adult ♂ Coll. Boulder Lake, Clallam County, Washington. D. G. Elliot.
56. Adult ♀ Coll. McDonald's Ranch, Clallam County, Washington. D. G. Elliot.
57–58. Adult ♂ Coll. Johnson's Ranch, Clallam County, Washington. D. G. Elliot.
59. Adult — P. Marion County, California. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Tamias townsendi hindsi (Gray).

Tamias hindsi Gray, Ann. Mag. Nat. Hist., 1st Ser., X, 1842, p. 264.

Tamias townsendi hindsii Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 70. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 86. Zoöl. Ser.

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HINDS'S CHIPMUNK.

1–10. Adult ♂ Topotypes. Coll. Nicasio, California. E. Heller.
11–26. Adult ♀ Topotypes. Coll. Nicasio, California. E. Heller.
27–30. Adult ♂ P. Big Basin, California. C. A. Coleman.
31–34. Adult ♀ P. Big Basin, California. C. A. Coleman.
35. Adult ♂ P. Snow Mts., California. W. W. Price.
36. Adult ♂ Coll. Point Reyes, California. E. Heller.
37–38. Adult ♀ Coll. . Point Reyes, California. E. Heller.
39. Adult — P. Big Trees, Santa Cruz Co., California. A. Forrer.

b. Tamias townsendi pricii (Allen).

Tamias pricei Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1895, p. 333.

Tamias townsendi pricei Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 70. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 87. Zoöl. Ser.

PRICE'S CHIPMUNK.

1–18. Adult ♂ Paratypes. P. Portola, California. J. Diefenbach.
19–31. Adult ♀ Paratypes. P. Portola, California. J. Diefenbach.

c. Tamias townsendi ochrogenys (Merriam).

Eutamias townsendii ochrogenys Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 206.

Tamias townsendi ochrogenys Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 71. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 87. Zoöl. Ser.

BUFF-CHEEKED CHIPMUNK.

1–5. Adult ♂ Topotypes. Coll. Mendocino, California. E. Heller.
6–14. Adult ♀ Topotypes. Coll. Mendocino, California. E. Heller.
15–17. Adult ♂ Coll. Eureka, California. E. Heller.
18–22. Adult ♀ Coll. Eureka, California. E. Heller.
23–31. Adult ♂ Coll. Requa, California. E. Heller.
32–34. Adult ♀ Coll. Requa, California. E. Heller.
35–40. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
41–43. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.
44. Adult ♂ Coll. Agness, Oregon. E. Heller.

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d. Tamias townsendi littoralis Elliot.

Tamias townsendi littoralis Elliot, Pub. Field Columb. Mus., III, 1903, p. 153. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 87. Zoöl. Ser.

COAST CHIPMUNK.

1–4. Adult ♂ Paratypes. Coll. Marshfield, Oregon. E. Heller.
5–10. Adult ♀ Type & paratypes. Coll. Marshfield, Oregon. E. Heller.
11–13. Adult ♂ Coll. Gardiner, Oregon. E. Heller.
14–15. Adult ♀ Coll. Gardiner, Oregon. E. Heller.
16. Adult ♂ Coll. Florence, Oregon. E. Heller.
17–18. Adult ♀ Coll. Florence, Oregon. E. Heller.
19. Adult ♀ Coll. Scottsburg, Oregon. E. Heller.

262. Tamias merriami (Allen).

Tamias asiaticus merriami Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1889, p. 176.

Tamias merriami Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 71. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 137. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 88. Zoöl. Ser.

MERRIAM'S CHIPMUNK.

1–8. Adult ♂ Coll. Mt. Pinos, Ventura County, California. E. Heller.
9–12. Adult ♀ Coll. Mt. Pinos, Ventura County, California. E. Heller.
13. Adult ♀ Paratype. Exch. San Bernardino Mts., California. Am. Mus. Nat. Hist. N. Y. F. Stephens.
14–15. Adult ♀ Exch. Smiths Mts., California. Am. Mus. Nat. Hist. N. Y. C. K. Worthern.
16. Adult ♂ Exch. Campbell's Ranch, San Diego Co., California. Am. Mus. Nat. Hist. N. Y. F. X. Holzner.
17. Adult ♀ Exch. Campbell's Ranch, San Diego Co., California. Am. Mus. Nat. Hist. N. Y. F. X. Holzner.
18. Adult ♀ Coll. Castac Lake, Fort Tejon, California. E. Heller.

263. Tamias obscurus Allen.

Tamias obscurus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 70. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 136, figs. 22, XXX. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 88. Zoöl. Ser.

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FIG. XXVII. TAMIAS OBSCURUS. LOWER CALIFORNIA CHIPMUNK.

LOWER CALIFORNIA CHIPMUNK.

1. Adult ♂ Exch. San Pedro Martir Mts., Lower California, Mexico. Am. Mus. Nat. Hist. N. Y. E. C. Thurber.
4–5. Adult ♀ Exch. San Pedro Martir Mts., Lower California, Mexico. Am. Mus. Nat. Hist. N. Y. A. W. Anthony.
6–8. Adult ♂ Coll. La Grulla, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
9–14. Adult ♀ Coll. La Grulla, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
15–16. Adult ♂ Coll. Hanson Lagoon, Hanson Laguna Mts., Lower California, Mexico. E. Heller.
17–18. Adult ♀ Coll. Santa Rosa, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
19. Adult ♂ Coll. Vallecitos, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
20–25. Adult ♀ Coll. Vallecitos, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
26–31. Adult ♂ Coll. Santa Eulalia, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
32–39. Adult ♀ Coll. Santa Eulalia, San Pedro Martir Mts.. Lower California, Mexico. E. Heller.
40. Adult ♂ Coll. Rosarito Divide, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
41. Adult ♀ Coll. Rosarito Divide, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
42. Adult ♀ Coll. Aguaje da las Fresas, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

264. Tamias nexus Elliot.

Tamias nexus Elliot, Proc. Biol. Soc. Wash., XVIII, 1905, p. 233.

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ALLIED CHIPMUNK.

1–3. Adult ♂ Paratypes. Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

4–5. Adult ♀ Type & paratypes. Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

265. Tamias quadrimaculatus Gray.

Tamias quadrimaculatus Gray, Ann. Mag. Nat. Hist., 3rd Ser., XX, 1867, p. 435. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 71. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 88. Zoöl. Ser.

Tamias macrorhabdotes Merr., Proc. Biol. Soc. Wash., III, 1886, p. 25, fig. p. 26.

FOUR-BANDED CHIPMUNK.

1. Adult ♂ P. Quincy, California. F. Stephens.

2. Adult ♀ Exch. Red Point, California. Am. Mus. Nat. Hist. N. Y. W. W. Price.

3–6. Adult ♂ Exch. Blue Cañon, Placer County, California. Am. Mus. Nat. Hist. N. Y. C. A. Allen.

7. Adult ♀ Exch. Blue Cañon, Placer County, California. Am. Mus. Nat. Hist. N. Y. C. A. Allen.

8. Adult ♀ P. Chaparral, Butte County, California. C. K. Worthern.

9. Adult ♂ P. Modoc County, California. H. Bidwell.

10. Adult ♂ P. Blue Cañon, Placer County, California. C. K. Worthern.

11. Adult ♀ P. Blue Cañon, Placer County, California. C. K. Worthern.

12–16. Adult ♂ P. Bear Valley, Mariposa County, California. A. Forrer.

17–20. Adult ♀ P. Bear Valley, Mariposa County, California. A. Forrer.

21–22. Juv. ♂ P. Bear Valley, California. A. Forrer.

266. Tamias senex Allen.

Tamias senex Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 83. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 72. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 89. Zoöl. Ser.

GRAY CHIPMUNK.

1. Adult ♂ P. Hermit Valley, California. W. W. Price.

2–5. Adult ♀ P. Hermit Valley, California. W. W. Price.

6. Adult ♂ P. Bloods, Alpine County, California. W. W. Price.

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7–8. Adult ♀ P. Bloods, Alpine County, California. W. W. Price.
9–11. Adult ♂ P. Woodfords, Alpine County, California. W. W. Price.
12. Adult ♀ P. Woodfords, Alpine County, California. W. W. Price.
13–14. Adult ♂ P. Pyramid Peak, Eldorado County, California. W. W. Price.
15–19. Adult ♀ P. Pyramid Peak, Eldorado County, California. W. W. Price.
20–22. Adult ♂ P. Silver Lake, Amador County, California. W. W. Price.
23–26. Adult ♀ P. Silver Lake, Amador County, California. W. W. Price.
27. Adult ♀ P. Blue Lake, Humboldt County, California. W. W. Price.
28. Adult ♂ P. Chaparral, Butte County, California. E. Adams.
29. Adult ♀ P. Willow Creek Valley, Lassen County, California. E. Adams.

267. Tamias speciosus Allen.

Tamias speciosus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 86. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 72. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 89. Zoöl. Ser.

SHOWY CHIPMUNK.

1–19. Adult ♂ Coll. Bear Valley, San Bernardino Mts., California. E. Heller.
20–30. Adult ♀ Coll. Bear Valley, San Bernardino Mts., California. E. Heller.
31. Adult ♂ P. San Jacinto Mts., California. F. Stephens.
32. Adult ♀ Exch. San Bernardino Mts., California. Am. Mus. Nat. Hist. N. Y. F. Stephens.

a. Tamias speciosus inyoensis (Merriam).

Eutamias speciosus inyoensis Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 208.

Tamias callipeplus inyoensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 73. Zoöl. Ser.

Tamias speciosus inyoensis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 89. Zoöl. Ser.

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INYO MOUNTAINS CHIPMUNK.

1. Adult ♂ Coll. Inyo Mountains, summits E. of Lone Pine, California. E. Heller.
2. Adult ♀ Coll. Inyo Mountains, summits E. of Lone Pine, California. E. Heller.

268. Tamias frater Allen.

Tamias frater Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 88. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 73. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 90. Zoöl. Ser.

RELATED CHIPMUNK.

1–4. Adult ♂ Coll. Monache Meadows, Mt. Whitney, California. E. Heller.
5–6. Adult ♀ Coll. Monache Meadows, Mt. Whitney, California. E. Heller.
7–8. Adult ♀ Coll. Big Cottonwood Lakes, Mt. Whitney, California. E. Heller.
9. Adult ♀ Coll. Hot Springs, Mt. Whitney, California. E. Heller.
10–14. Adult ♂ Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.
15–17. Adult ♀ Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.
18–20. Adult ♂ Coll. Whitney Creek, Mt. Whitney, California. E. Heller.
21–22. Adult ♀ Coll. Whitney Creek, Mt. Whitney, California. E. Heller.
23. Adult ♂ P. Echo, Amador County, California. W. W. Price.
24–27. Juv. ♂ P. Echo, Amador County, California. W. W. Price.
28. Adult ♀ P. Echo, Amador County, California. W. W. Price.
29–33. Adult ♂ P. Hermit Valley, Calaveras County, California. W. W. Price.
34–37. Juv. ♂ P. Hermit Valley, Calaveras County, California. W. W. Price.
38–41. Adult ♀ P. Hermit Valley, Calaveras County, California. W. W. Price.
42–49. Juv. ♀ P. Hermit Valley, Calaveras County, California. W. W. Price.

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50–65. Adult ♂ P. Silver Lake, Amador County, California. W. W. Price.
66–88. Adult ♀ P. Silver Lake, Amador County, California. W. W. Price.
89–91. Juv. ♀ P. Silver Lake, Amador County, California. W. W. Price.
92–94. Juv. ♂ P. Silver Lake, Amador County, California. W. W. Price.
95–96. Juv. ♂ P. Edgewood, Douglas County, Nevada. W. W. Price.
97–100. Juv. ♀ P. Edgewood, Douglas County, Nevada. W. W. Price.
101–102. Adult ♂ P. Bloods, Calaveras County, California. W. W. Price.
103–107. Adult ♀ P. Bloods, Calaveras County, California. W. W. Price.
108. Juv. ♂ P. Modoc County, California. W. W. Price.
109–110. Juv. ♀ P. Modoc County, California. W. W. Price.
111–113. Juv. ♂ P. Woodfords, Alpine County, California. W. W. Price.
114–116. Adult ♂ P. Blue Lake, Alpine County, California. W. W. Price.
117. Juv. ♂ P. Anderson's Ranch, Douglas County, Nevada. W. W. Price.
118. Juv. ♀ P. Anderson's Ranch, Douglas County, Nevada. W. W. Price.
119. Juv. ♀ P. Mt. Siegel, Nevada. W. W. Price.
120–125. Adult ♂ P. Pyramid Peak, Eldorado County, California. W. W. Price.
126–130. Juv. ♂ P. Pyramid Peak, Eldorado County, California. W. W. Price.
131–147. Adult ♀ P. Pyramid Peak, Eldorado County, California. W. W. Price.
148–149. Juv. ♀ P. Pyramid Peak, Eldorado County, California. W. W. Price.

269. Tamias panamintinus Merriam.

Tamias panamintinus Merr., Proc. Biol. Soc. Wash., VIII, 1893, p. 134. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 74. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 90. Zoöl. Ser.

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PANAMINT MOUNTAINS CHIPMUNK.

1–8. Adult ♂ Coll. Hannopee Cañon, Panamint Mts., California. E. Heller.

9–18. Adult ♀ Coll. Hannopee Cañon, Panamint Mts., California. E. Heller.

19–24. Adult ♂ Coll. Coal Kilns, Panamint Mts., California. E. Heller.

25–35. Adult ♀ Coll. Coal Kilns, Panamint Mts., California. E. Heller.

36–41. Adult ♂ Coll. Inyo Mountains, summits E. of Lone Pine, California. E. Heller.

42–47. Adult ♀ Coll. Inyo Mountains, summits E. of Lone Pine, California. E. Heller.

48–51. Adult ♂ Coll. Beveridge Cañon, Inyo Mountains, California. E. Heller.

52–56. Adult ♀ Coll. Beveridge Cañon, Inyo Mountains, California. E. Heller.

270. Tamias amœnus Allen.

Tamias amœnus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 90. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 74. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 90. Zoöl. Ser.

CHARMING CHIPMUNK.

1. Adult ♂ P. Hermit Valley, Calaveras County, California. W. W. Price.

2–4. Adult ♀ P. Hermit Valley, Calaveras County, California. W. W. Price.

5–9. Adult ♂ P. Pyramid Peak, Eldorado County, California. W. W. Price.

10–24. Adult ♀ P. Pyramid Peak, Eldorado County, California. W. W. Price.

25–30. Adult ♂ P. Silver Lake, Amador County, California. W. W. Price.

31–32. Adult ♀ P. Silver Lake, Amador County, California. W. W. Price.

33. Adult ♂ P. Woodfords, Alpine County, California. W. W. Price.

34. Adult ♂ P. Lassen Creek, S. E. of Lancaster, California. W. W. Price.

271. Tamias caurinus (Merriam).

Eutamias caurinus Merr., Proc. Acad. Nat. Scien. Phil., 1898, p. 352.

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Tamias caurinus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 74. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 90. Zoöl. Ser.

NORTHWEST CHIPMUNK.

1–19. Adult ♂ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

20–24. Juv. ♂ Coll. Happy Lake, Olympic Mts., Clallam Co., Washington. D. G. Elliot.

25–35. Adult ♀ Coll. Happy Lake, Olympic Mts., Clallam Co., Washington. D. G. Elliot.

36–37. Juv. ♀ Coll. Happy Lake, Olympic Mts., Clallam Co., Washington. D. G. Elliot.

38–40. Adult ♂ Coll. Boulder Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

41–46. Adult ♀ Coll. Boulder Lake, Olympic Mts., Clallam Co., Washington. D. G. Elliot.

272. Tamias cinereicollis Allen.

Tamias cinereicollis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 94. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 75. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 90. Zoöl. Ser.

ASH-COLORED CHIPMUNK.

1–15. Adult ♂ P. White Mountains, Arizona. W. W. Price.

16–24. Adult ♀ P. White Mountains, Arizona. W. W. Price.

25–28. Adult — P. White Mountains, Arizona. W. W. Price.

273. Tamias quadrivittatus (Say).

Sciurus quadrivittatus Say, Long's Exped. Rocky Mts., II, 1823, p. 45.

Tamias quadrivittatus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 75. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 138. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 91. Zoöl. Ser.

COLORADO CHIPMUNK.

1–6. Adult ♂ Exch. Florida, La Plata County, Colorado. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

7–10. Adult ♀ Exch. Florida, La Plata County, Colorado. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

11. Adult ♂ Exch. Colorado Springs, Colorado. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

12–13. Adult ♂ Exch. Three Forks, N. Western Colorado. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

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14. Adult ♀ Exch. Three Forks, N. Western Colorado. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
15. Adult ♂ Exch. Sherman, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
16. Adult ♀ Exch. Sherman, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
17–18. Adult ♂ Exch. Rockwell, Colorado. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
19. Adult ♀ Exch. Rockwell, Colorado. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
20–24. Adult ♂ P. Boulder, Boulder County, Colorado. R. T. Young.
25–30. Adult ♀ P. Boulder, Boulder County, Colorado. R. T. Young.
31. Adult ♀ P. Silver Lake, Boulder County, Colorado. R. T. Young.
32. Adult ♀ P. Nederland, Boulder County, Colorado. R. T. Young.
33–34. Adult ♂ P. Cuidad, State of Durango, Mexico. A. Forrer.

a. Tamias quadrivittatus luteiventris Allen.

Tamias quadrivittatus luteiventris Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 101. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 76. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 92. Zoöl. Ser.

BUFF-BELLIED CHIPMUNK.

1–3. Adult ♂ P. Eagle Creek, Montana. E. Thompson Seton.
4–5. Adult ♀ P. Eagle Creek, Montana. E. Thompson Seton.
6. Adult ♂ P. Yancey, Yellowstone National Park. E. Thompson Seton.

b. Tamias quadrivittatus felix Rhoads.

Tamias quadrivittatus felix Rhoads, Amer. Nat., XXIX, 1895, p. 941. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 76. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 92. Zoöl. Ser.

HAPPY CHIPMUNK.

1. Adult ♂ P. Mount Baker Range, British Columbia, Canada. C. K. Worthern.
2. Adult ♀ P. Mount Baker Range, British Columbia, Canada. C. K. Worthern.

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c. *Tamias quadrivittatus affinis* Allen.

Tamias quadrivittatus affinis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 103. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 77. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 92. Zoöl. Ser.

ALLIED CHIPMUNK.

1–2. Adult ♂ Paratypes. Exch. Ashcroft, British Columbia, Canada. Am. Mus. Nat. Hist. N. Y. C. P. Streator.

d. *Tamias quadrivittatus borealis* (Allen).

Tamias asiaticus borealis Allen, Mon. N. Am. Rod., 1877, p. 793.

Tamias quadrivittatus borealis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 77. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 92. Zoöl. Ser.

NORTHERN CHIPMUNK.

1–4. Adult ♀ Exch. Glendale, S. Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

5–8. Adult ♂ P. Canadian Nat. Park, Alberta, Canada. G. F. Dippie.

9–11. Adult ♀ P. Canadian Nat. Park, Alberta, Canada. G. F. Dippie.

12. Adult ♂ P. Banff, Alberta, Canada. G. F. Dippe.

13. Adult ♂ P. Cariboo, British Columbia, Canada. C. K. Worthern.

14. Adult ♀ P. Cariboo, British Columbia, Canada. C. K. Worthern.

e. *Tamias quadrivittatus neglectus* Allen.

Tamias quadrivittatus neglectus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 106. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 78. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 92. Zoöl. Ser.

NEGLECTED CHIPMUNK.

1–6. Adult ♂ P. Park Siding, Michigan. C. Brandler.

7–12. Adult ♀ P. Park Siding, Michigan. C. Brandler.

13. Adult ♂ P. Seney, Schoolcraft County, Michigan. T. Surber.

14. Adult ♂ P. Knoxville, Iowa. G. K. Cherrie.

15. Adult ♂ Exch. Camp Douglas, Wisconsin. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

16–17. Juv. ♂ Exch. Camp Douglas, Wisconsin. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

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18–19. Adult ♀ Exch. Camp Douglas, Wisconsin. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

20–22. Juv. ♀ Exch. Camp Douglas, Wisconsin. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

274. Tamias hopiensis (Merriam).

Tamias quadrivittatus gracilis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 76. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 91. Zoöl. Ser. (nec Allen.)

Eutamias hopiensis Merr., Proc. Biol. Soc. Wash., XVIII, 1905, p. 165.

HOPI CHIPMUNK.

1. Adult ♂ Exch. Bluff City, Utah. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

2. Adult ♀ Exch. Bluff City, Utah. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

275. Tamias minimus Bachman.

Tamias minimus Bachm., Jour. Acad. Nat. Scien. Phil., 1839, p. 71. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 78. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 93. Zoöl. Ser.

LEAST CHIPMUNK.

1. Adult ♂ Exch. Pine Ridge Indian Reserv., S. Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

2. Adult ♀ Exch. Pine Ridge Indian Reserv., S. Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

a. Tamias minimus consobrinus Allen.

Tamias asiaticus var. *pallidus* Allen, Mon. N. Am. Rod., 1877, p. 793. (Part.)

Tamias minimus consobrinus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 112. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 78. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 93. Zoöl. Ser.

RELATED CHIPMUNK.

1. Adult ♀ Exch. Aurora, Carbon County, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

2–5. Adult ♀ Exch. Bitter Creek, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

6. Adult ♂ P. Billings, Montana. E. Thompson Seton.

7. Adult ♀ P. Billings, Montana. E. Thompson Seton.

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b. Tamias minimus pictus Allen.

Tamias minimus pictus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 115. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 79. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 94. Zoöl. Ser.

PAINTED CHIPMUNK.

1–6. Adult ♂ P. Mount Siegel, Nevada. W. W. Price.
7–8. Juv. ♂ P. Mount Siegel, Nevada. W. W. Price.
9–12. Adult ♀ P. Mount Siegel, Nevada. W. W. Price.
13–14. Adult — Pres. Petit Lake, Idaho. S. E. Meek.
15. Adult ♀ P. Bunch Grass Spring, Madeline Plains, Modoc County, California. F. Stephens.

c. Tamias minimus alpinus (Merriam).

Tamias alpinus Merr., Proc. Biol. Soc. Wash., VIII, 1893, p. 137.

Tamias minimus alpinus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 79. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 94. Zoöl. Ser.

ALPINE CHIPMUNK.

1–3. Adult ♂ Coll. Whitney Creek, Mt. Whitney, California. E. Heller.
4–6. Adult ♀ Coll. Whitney Creek, Mt. Whitney, California. E. Heller.
7–13. Adult ♂ Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.
14–16. Adult ♀ Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.
17–21. Adult ♂ Coll. Whitney Meadows, Mt. Whitney, California. E. Heller.
22–23. Adult ♀ Coll. Whitney Meadows, Mt. Whitney, California. E. Heller.
24–26. Adult ♂ Coll. Old Mount Whitney, California. E. Heller.

Subgenus B. **Tamias.**

276. Tamias striatus (Linnæus).

Sciurus striatus Linn., Syst. Nat., I, 1758, p. 64.

Sciurus americanus Gmel., Syst. Nat., I, 1788, p. 150.

Tamias striatus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 80. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 95. Zoöl. Ser.

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STRIPED CHIPMUNK.

1. Adult ♂ Exch. Hastings, New York. Am. Mus. Nat. Hist. N. Y. W. M. Richardson.
2. Adult ♀ Exch. Hastings, New York. Am. Mus. Nat. Hist. N. Y. J. Rowley.
3. Adult — Exch. Cornwall, New York. Am. Mus. Nat. Hist. N. Y. C. A. Allen.
4. Adult — P. Tamarack Swamp, Pennsylvania. T. Surber.
5. Adult ♀ Exch. Newton, New Jersey. Am. Mus. Nat. Hist. N. Y. G. Lewis.
6. Adult — Exch. Hiskatom, New Jersey. Am. Mus. Nat. Hist. N. Y. L. L. Foster.

7–10. Adult ♂ P. White Sulphur Springs, West Virginia. T. Surber.

11. Juv. ♂ P. White Sulphur Springs, West Virginia. T. Surber.

12–14. Adult ♀ P. White Sulphur Springs, West Virginia. T. Surber.

15. Juv. ♀ P. Black Mountain Springs, West Virginia. T. Surber.
16. Adult ♂ Pres. Hicksville, Ohio. S. E. Meek.
17. Adult ♂ P. Cedar Rapids, Iowa. G. K. Cherrie.

18–19. Adult ♀ Coll. Gravenhurst, Ontario, Canada. L. Kenkel.

20–21. Adult ♂ Exch. Weaverville, North Carolina. Am. Mus. Nat. Hist. N. Y. J. S. Cairns.

22–24. Adult ♀ Exch. Weaverville, North Carolina. Am. Mus. Nat. Hist. N. Y. J. S. Cairns.

25. Adult — P. New York. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Tamias striatus lysteri (Richardson).

Sciurus (*Tamias*) *lysteri* Richard., Faun. Bor. Amer., Mamm., I, 1829, p. 181, pl. 15.

Tamias striatus lysteri Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 80. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 95. Zoöl. Ser.

LYSTER'S STRIPED CHIPMUNK.

1. Adult ♂ Exch. Stamford, Connecticut. Am. Mus. Nat. Hist. N. Y. C. A. Smith.
2. Adult ♀ Exch. Stamford, Connecticut. Am. Mus. Nat. Hist. N. Y. W. Dutcher.

3–4. Adult ♂ Exch. Rutland, Vermont. Am. Mus. Nat. Hist. N. Y. W. M. Richardson.

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5. Adult ♂ Exch. Tobique Point, New Brunswick. Am. Mus. Nat. Hist. N. Y. J. Rowley.
6. Adult ♀ Exch. Tobique Point, New Brunswick. Am. Mus. Nat. Hist. N. Y. J. Rowley.
7–15. Adult ♂ Coll. Murray Bay, Prov. Quebec, Canada. T. Surber.
16–20. Adult ♀ Coll. Murray Bay, Prov. Quebec, Canada. T. Surber.
21–24. Adult ♂ Coll. Trout Creek, Prov. Ontario, Canada. L. Kenkel.
25–26. Adult ♂ P. Branchton, Prov. Ontario, Canada. G. F. Dippie.
27. Adult ♀ P. Branchton, Prov. Ontario, Canada. G. F. Dippie.
28–30. Adult ♀ Exch. Linwood, Prov. Ontario, Canada. Am. Mus. Nat. Hist. N. Y. S. E. Atkinson.
31. Juv. ♀ Exch. Linwood, Prov. Ontario, Canada. Am. Mus. Nat. Hist. N. Y. S. E. Atkinson.
32–35. Adult ♂ Coll. Gravenhurst, Prov. Ontario, Canada. L. Kenkel.
36–39. Adult ♀ Coll. Gravenhurst, Prov. Ontario, Canada. L. Kenkel.
40–42. Adult — Coll. Gravenhurst, Prov. Ontario, Canada. S. E. Meek.
43. Adult ♀ Pres. Laporte, Indiana. C. M. Barber.
44. Adult ♀ Exch. South Twin Lake, Maine. Am. Mus. Nat. Hist. N. Y. J. Rowley.
45. Adult ♀ Coll. Fox Lake, Illinois. L. Pray.

b. Tamias striatus griseus Mearns.

Tamias striatus griseus Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 231. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 81. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 96. Zoöl. Ser.

GRAY STRIPED CHIPMUNK.

1–2. Adult ♂ P. Park Siding, Michigan. C. Brandler.
3. Adult ♂ P. Murphy Lake, Michigan. C. Brandler.
4–5. Adult ♂ Exch. Camp Douglas, Wisconsin. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
6–8. Adult ♂ Pres. Tomahawk Lake, Wisconsin. H. T. Chace.
9. Adult — Pres. Tomahawk Lake, Wisconsin. H. T. Chace.
10–11. Adult ♂ Paratypes. Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

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12–13. Adult ♀ Paratypes. Exch. Fort Snelling, Minnesota Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

Genus 104. **Citellus. Spermophiles.**

Citellus Oken, Lehrb. der Naturg., Zool., II, 1816, p. 842. Type *Mus citellus* Linnæus.

Spermophilus F. Cuv., Dents Mamm., 1825, pp. 160–161, pls. LV, 255.

Spermatophilus Wagl., Nat. Syst. Amphib., 1830, p. 22.

Citillus Lichten., Darst. neuer oder wenig bekannt. Säugeth., Heft. 5, 1827–34, Taf. XXXI, fig. 2.

Colobotis Brandt, Bull. Class. Phys.-Math. Acad. Imp. Scien. St. Pétersb., II, 1844, p. 365.

Otospermophilus Brandt, Bull. Class. Phys.-Math. Acad. Imp. Scien. St. Pétersb., II, 1844, p. 379.

Otocolobus Brandt, Bull. Class. Phys.-Math. Acad. Imp. Scien. St. Pétersb., II, 1844, p. 382.

Ictidomys Allen, Mon. N. Am. Rod., 1877, p. 821.

Spermophilopsis Blasius, Tag. 57ten Vers. Deut. Nat. Aerz., 1884, p. 324.

Ammospermophilus Merr., Proc. Biol. Soc. Wash., VII, 1892, p. 27.

Xerospermophilus Merr., Proc. Biol. Soc. Wash., VII, 1892, p. 27.

Callospermophilus Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 189. (note.)

Subgenus A. **Ammospermophilus.**

277. Citellus harrisi (Audubon & Bachman).

Spermophilus harrisii Aud. & Bach., Quad. N. Am., III, 1854, p. 267, pl. 144, fig. 1. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 85. Zoöl. Ser.

Citellus harrisi Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. 1, 1904, p. 141. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 96. Zoöl. Ser.

HARRIS'S SPERMOPHILE.

1–2. Adult ♂ Exch. Fort Verde, Arizona. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

3. Juv. ♀ Exch. Fort Verde, Arizona. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

4. Adult ♂ P. Fort Lowell, Arizona. Price & Condit.

5–6. Adult ♀ P. Fort Lowell, Arizona. Price & Condit.

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278. Citellus leucurus (Merriam).

Tamias leucurus Merr., N. Am. Faun., No. 2, 1889, p. 20.

Spermophilus leucurus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 86, fig. 18. Zoöl. Ser.

Citellus leucurus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 142. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 97. Zoöl. Ser.

WHITE-TAILED SPERMOPHILE.

1–7. Adult ♂ Coll. Palm Springs, California. E. Heller.
8–10. Adult ♀ Coll. Palm Springs, California. E. Heller.
11–15. Adult ♂ Coll. Daggett, California. E. Heller.
16–19. Adult ♂ Coll. Whitewater, California. E. Heller.
20–24. Adult ♀ Coll. Whitewater, California. E. Heller.
25–26. Adult ♂ Coll. Morongo Pass, California. E. Heller.
27. Adult ♀ Coll. Morongo Pass, California. E. Heller.
28–30. Adult ♀ Coll. Lone Willow Springs, California. E. Heller.
31. Adult ♂ P. Hesperia, Lancaster Co., California. E. C. Thurber.
32. Adult ♀ P. Hesperia, Lancaster Co., California. E. C. Thurber.
33. Adult ♀ P. Borego Springs, California. F. Stephens.
34. Adult ♂ P. Aguanga, Riverside Co., California. F. Stephens.
35. Adult ♀ P. Walker's Pass, Kern Co., California. F. Stephens.
36–37. Juv. ♂ P. Candelaria, Nevada. J. Rowley.
38–40. Juv. ♀ P. Candelaria, Nevada. J. Rowley.
41–43. Adult ♂ Coll. San Matias Spring, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
44. Adult ♀ Coll. San Matias Spring, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
45–46. Adult ♀ Coll. Parral, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
47. Adult ♀ Coll. Trinidad, Lower California, Mexico. E. Heller.
48–50. Adult ♂ Coll. San Felipe, Lower California, Mexico. E. Heller.
51–53. Adult ♀ Coll. San Felipe, Lower California, Mexico. E. Heller.
54. Adult ♀ P. San Felipe Cañon, San Diego Co., California. F. Stephens.

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55. Juv. ♂ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

a. Citellus leucurus cinnamomeus (Merriam).

Tamias leucurus cinnamomeus Merr., N. Am. Faun., No. 3, 1890, p. 51.

Spermophilus leucurus cinnamomeus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 86. Zoöl. Ser.

Citellus leucurus cinnamomeus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 97. Zoöl. Ser.

CINNAMON-HUED SPERMOPHILE.

1. Adult ♂ Exch. Bluff City, Utah. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
2. Adult ♀ Exch. Uncompahgre Indian Reserv., Utah. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
3. Adult ♂ P. Holbrook, Arizona. W. W. Price.

b. Citellus leucurus peninsulæ (Allen).

Tamias leucurus peninsulæ Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 197.

Citellus leucurus peninsulæ Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 143, fig. 24. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 97. Zoöl. Ser.

LOWER CALIFORNIA SPERMOPHILE.

1–6. Adult ♂ Coll. San Quentin, Lower California, Mexico. E. Heller.

7–10. Adult ♀ Coll. San Quentin, Lower California, Mexico. E. Heller.

11. Adult ♂ Coll. El Alamo, Lower California, Mexico. E. Heller.

12. Adult ♂ Coll. Agua Escondido, Lower California, Mexico. E. Heller.

13. Adult ♀ Coll. Agua Escondido, Lower California, Mexico. E. Heller.

279. Citellus vinnulus Elliot.

Citellus vinnulus Elliot, Pub. Field Columb. Mus., III, 1903, p. 241. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 98. Zoöl. Ser.

CHARMING SPERMOPHILE.

1. Adult ♂ Coll. Wild Rose Springs, Panamint Mts., California. E. Heller.
2. Adult ♀ Coll. Wild Rose Springs Panamint Mts., California. E. Heller.

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3. Adult ♂ Coll. Coal Kilns, Panamint Mts, California. E. Heller.
4–5. Adult ♀ Coll. Coal Kilns, Panamint Mts., California. E. Heller.
6. Adult ♂ Coll. Hannopee Cañon, Panamint Mts., California. E. Heller.
7–9. Adult ♂ Coll. Beveridge Cañon, Inyo Mts., California. E. Heller.
10. Adult ♀ Coll. Beveridge Cañon, Inyo Mts., California. E. Heller.
11–12. Adult ♂ Coll. Inyo Mts., summits E. of Lone Pine, California. E. Heller.
13. Adult ♀ Coll. Inyo Mts., summits E. of Lone Pine, California. E Heller.
14. Adult ♂ Coll. Mines, Old Coso, Coso Mountains, California. E. Heller.
15. Adult ♀ Coll. Mines, Old Coso, Coso Mountains, California. E. Heller.
16–18. Adult ♂ Paratypes. Coll. Keeler, Owen's Valley, California. E. Heller.
19. Adult ♀ Type. Coll. Keeler, Owen's Valley, California. E. Heller.

280. Citellus nelsoni (Merriam).

Spermophilus nelsoni Merr., Proc. Biol. Soc. Wash., VIII, 1893, p. 129. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 87. Zoöl. Ser.

Citellus nelsoni Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 99. Zoöl. Ser.

NELSON'S SPERMOPHILE.

1–3. Adult ♂ Coll. Rose Station, Fort Tejon, California. E. Heller.
4–5. Adult ♀ Coll. Rose Station, Fort Tejon, California. E. Heller.

Subgenus B. **Xerospermophilus.**

a. Citellus spilosoma macrospilotus (Merriam).

Spermophilus spilosoma macrospilotus Merr., N. Amer. Faun., No. 4, 1890, p. 38. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 96, fig. 21. Zoöl. Ser.

Citellus spilosoma macrospilotus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 145, fig. 25. Zoöl.

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Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 99. Zoöl. Ser.

SPOTTED SPERMOPHILE.

1. Adult ♂ P. Fairbank, Arizona. B. L. Condit.
2. Adult ♂ P. S-B. Ranch, Arizona. B. L. Condit.
3. Adult — P. Chiricahua Mountains, Arizona. W. W. Price.

281. Citellus eremonomus Elliot.

Citellus eremonomus Elliot, Pub. Field Columb. Mus., III, 1903, p. 243. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 101. Zoöl. Ser.

DEATH VALLEY SPERMOPHILE.

1–2. Adult ♂ Paratypes. Coll. Furnace Creek, Death Valley, California. E. Heller.
3. Adult ♀ Type. Coll. Furnace Creek, Death Valley, California. E. Heller.

282. Citellus tereticaudus (Baird).

Spermophilus tereticaudus Baird, N. Am. Mamm., 1857, p. 315. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 98. Zoöl. Ser.

Citellus tereticaudus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 144. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 102. Zoöl. Ser.

ROUND-TAILED SPERMOPHILE.

1–9. Adult ♂ Coll. San Felipe, Lower California, Mexico. E. Heller.
10–18. Adult ♀ Coll. San Felipe, Lower California, Mexico. E. Heller.
19. Adult ♂ P. Fort Lowell, Arizona. L. Miller.
20–24. Adult ♀ P. Fort Lowell, Arizona. L. Miller.
25. Adult ♀ Exch. Phœnix, Arizona. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
26. Adult ♀ P. Salt Creek, Colorado Desert, California. F. Stephens.
27. Adult ♂ P. Near Sutton, Colorado Desert, California. F. Stephens.
28. Adult ♂ P. Borego Springs, California. F. Stephens.
29. Adult ♀ P. Borego Springs, California. F. Stephens.
30. Adult ♂ P. Pelican Lake, Colorado Desert, California. F. Stephens.
31. Adult ♀ P. Fish Spring, Colorado Desert, California. F. Stephens.

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a. Citellus tereticaudus mohavensis (Merriam).

Spermophilus mohavensis Merr., N. Am. Faun., No. 2, 1889, p. 15. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 98. Zoöl. Ser.

Citellus tereticaudus mohavensis Elliot, Pub. Field Columb. Mus., III, 1903, p. 291. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 102. Zoöl. Ser.

MOHAVE DESERT SPERMOPHILE.

1–23. Adult ♂ Coll. Daggett, Mohave Desert, California. E. Heller.

24–34. Adult ♀ Coll. Daggett, Mohave Desert, California. E. Heller.

283. Citellus chlorus Elliot.

Citellus chlorus Elliot, Pub. Field Columb. Mus., III, 1903, p. 242. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 103. Zoöl. Ser.

PALE SPERMOPHILE.

1–6. Adult ♂ Type & paratypes. Coll. Palm Springs, California. E. Heller.

7–9. Adult ♀ Paratypes. Coll. Palm Springs, California. E. Heller.

284. Citellus mexicanus (Erxleben).

Sciurus mexicanus Erxl., Syst. Regn. Anim., I, 1777, p. 428.

Citellus mexicanus Licht., Darst. neuer oder wenig bekannt. Säugeth., 1830, pl. 31, fig. 2. (ex Toluca.) Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 146. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 103. Zoöl. Ser.

Spermophilus mexicanus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 98. Zoöl. Ser.

MEXICAN SPERMOPHILE.

1–3. Adult ♂ P. Corpus Christi, Texas. G. K. Cherrie.

4. Adult — P. Brownsville, Texas. Ward's Nat. Scien. Establ., Rochester, N. Y.

5. Juv. ♂ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

a. Citellus mexicanus parvidens (Mearns).

Spermophilus mexicanus parvidens Mearns, Proc. U. S. Nat. Mus., XVIII, 1896, p. 443. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 99. Zoöl. Ser.

Citellus mexicanus parvidens Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 146. Zoöl. Ser. *Id.*

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Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub. VI, 1905, p. 104. Zoöl. Ser.

SMALL-TOOTHED SPERMOPHILE.

1. Adult ♀ Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
2. Adult ♀ Exch. Brownsville, Texas. Am. Mus. Nat. Hist. N. Y. F. Armstrong.

Subgenus C. Ictidomys.

285. Citellus tredecimlineatus (Mitchill).

Sciurus tridecemlineatus (sic) Mitch., Lond. Med. Repos., N. S., 1821, p. 248.

Arctomys hoodi Sabine, Trans. Linn. Soc., 1822, p. 590, pl. 29.

Spermophilus tridecemlineatus! Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 100, fig. 22. Zoöl. Ser.

Citellus tredecimlineatus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 104. Zoöl. Ser.

13-STRIPED SPERMOPHILE.

1–8. Adult ♀ P. Jackson Park, Chicago, Ill. W. Brandler.
9–17. Adult ♂ Coll. Oakwoods Cemetery, Chicago, Ill. L. Kenkel.
18–29. Adult ♀ Coll. Oakwoods Cemetery, Chicago, Ill. L. Kenkel.
30. Juv. ♂ Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
31–32. Adult ♀ Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
33. Adult ♂ Exch. Douglas County, Kansas. Am. Mus. Nat. Hist. N. Y. L. L. Dyche.
34–38. Adult ♂ Coll. Oakes, North Dakota. W. E. Snyder.
39–42. Adult ♀ Coll. Oakes, North Dakota. W. E. Snyder.
43. Adult ♀ Coll. Jamestown, North Dakota. W. E. Snyder.
44–45. Adult ♂ Coll. Minot, North Dakota. W. E. Snyder.
46–48. Adult ♀ Coll. Minot, North Dakota. W. E. Snyder.
47. Adult ♀ Coll. Braddock, North Dakota. W. E. Snyder.
48. Adult ♂ Coll. Steele, North Dakota. W. E. Snyder.
49–53. Adult ♀ Coll. Steele, North Dakota. W. E. Snyder.
54–55. Adult ♂ Coll. Minnewaukon, North Dakota. W. E. Snyder.
56. Adult ♀ Coll. Minnewaukon, North Dakota. W. E. Snyder.
57–58. Adult ♂ P. Blindman River, Alberta, Canada. G. F. Dippie.

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59–61. Adult ♂ P. Edmonton, Alberta, Canada. G. F. Dippie.
62. Adult ♀ P. Red Deer, Alberta, Canada. G. F. Dippie.
63–64. Adult — P. Red Deer, Alberta, Canada. G. F. Dippie.
65–66. Adult ♂ Coll. Fox Lake, Illinois. L. Pray.
67–68. Adult ♀ Coll. Fox Lake, Illinois. L. Pray.

a. Citellus tredecimlineatus pallidus (Allen).

Spermophilus tridecemlineatus! pallidus Allen, Mon. N. Am. Rodent., 1877, p. 872. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p 100. Zoöl. Ser.

Citellus tredecimlineatus pallidus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 104. Zoöl. Ser.

PALLID SPERMOPHILE.

1. Juv. ♀ Exch. Colorado Springs, Colorado. Am. Mus. Nat. Hist. N. Y. C. A. Smith.

b. Citellus tredecimlineatus olivaceus (Allen).

Spermophilus tridecemlineatus! olivaceus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1895, p. 337. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 100. Zoöl. Ser.

Citellus tredecimlineatus olivaceus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 104. Zoöl. Ser.

OLIVACEOUS SPERMOPHILE.

1. Adult ♂ Paratype. Exch. Custer, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
2. Adult ♀ Paratype. Exch. Custer, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
3–4. Adult ♂ P. Boulder, Colorado. R. T. Young.
5. Adult — Exch. Illinois. Am. Mus. Nat. Hist. N. Y.

c. Citellus tredecimlineatus parvus (Allen).

Spermophilus tridecemlineatus! parvus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1895, p. 337. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 100. Zoöl. Ser.

Citellus tredecimlineatus parvus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 104. Zoöl. Ser.

LITTLE SPERMOPHILE.

1. Adult ♀ Paratype. Exch. Uncompahgre Indian Res., Utah. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

d. Citellus tredecimlineatus texensis (Merriam).

Spermophilus tridecemlineatus! texensis Merr., Proc. Biol. Soc. Wash., XII, 1898, p. 71. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 101. Zoöl. Ser.

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Citellus tredecimlineatus texensis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 105. Zoöl. Ser.

TEXAS SPERMOPHILE.

1–10. Adult ♂ Coll. Noble, Oklahoma Territory. T. Surber.
11–12. Adult ♀ Coll. Noble, Oklahoma Territory. T. Surber.
13–14. Adult ♂ Coll. Alva, Oklahoma Territory. T. Surber.
15–20. Adult ♀ Coll. Alva, Oklahoma Territory. T. Surber.
21. Adult ♀ Coll. White Horse Spring, Oklahoma Territory. T. Surber.
22. Adult ♀ Coll. Arnettville, Oklahoma Territory. T. Surber.

286. Citellus franklini (Sabine).

Arctomys franklinii Sabine, Trans. Linn. Soc., 1822, p. 587, pl. 27.
Spermophilus franklini Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 101. Zoöl. Ser.
Citellus franklini Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 105. Zoöl. Ser.

FRANKLIN'S SPERMOPHILE.

1–4. Adult ♂ Coll. Oakes, North Dakota. W. E. Snyder.
5–6. Adult ♀ Coll. Oakes, North Dakota. W. E. Snyder.
7. Adult ♀ P. Warsaw, Illinois. C. K. Worthern.
8. Adult ♀ Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

Subgenus D. **Callospermophilus.**

287. Citellus lateralis (Say).

Sciurus lateralis Say, Long's Exped. Rocky Mts., II, 1823, p. 46.
Spermophilus lateralis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 83, fig. 17. Zoöl. Ser.
Citellus lateralis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 105. Zoöl. Ser.

STRIPED SPERMOPHILE.

1. Juv. ♂ Exch. Florida, La Plata County, Colorado. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
2–6. Adult ♀ Exch. Florida, La Plata County, Colorado. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
7. Adult ♀ Exch. Durango, Colorado. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
8. Juv. — Exch. Mill City, Colorado. Am. Mus. Nat. Hist. N. Y. C. H. Eagle.

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9. Adult ♀ Exch. Mill City, Colorado. Am. Mus. Nat. Hist. N. Y. C. H. Eagle.
10–11. Adult ♀ P. Boulder County, Colorado. R. T. Young.
12. Adult ♂ Exch. White Mountains, Arizona. Am. Mus. Nat. Hist. N. Y. B. C. Condit.
13–15. Adult ♂ P. White Mountains, Arizona. W. W. Price.
16–18. Adult ♀ P. White Mountains, Arizona. W. W. Price.
19. Adult ♂ P. Cooley's Ranch, White Mountains, Arizona. J. Diefenbach.
20–21. Adult — P. Cooley's Ranch, White Mountains, Arizona. J. Diefenbach.
22. Adult ♂ Exch. Baker's Butte, Arizona. Am. Mus Nat. Hist. N. Y. E. A. Mearns.
23. Adult ♀ Exch. Baker's Butte, Arizona. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

288. Citellus cinerascens (Merriam).

Tamias cinerascens Merr., N. Am. Faun., No. 4, 1890, p. 20.
Spermophilus cinerascens Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 83. Zoöl. Ser.
Citellus cinerascens Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 106. Zoöl. Ser.

ASHY SPERMOPHILE.

1–6. Adult ♂ P. National Park, Alberta, Canada. G. F. Dippie.
7. Adult ♀ P. National Park, Alberta, Canada. G. F. Dippie.
8. Adult ♂ P. Banff, Alberta, Canada. G. F. Dippie.
9–10. Adult ♀ P. Banff, Alberta, Canada. G. F. Dippie.
11–13. Adult — Pres. Petit Lake, Idaho. S. E. Meek.

289. Citellus chrysodeirus (Merriam).

Tamias chrysodeirus Merr., N. Am. Faun., No. 4, 1890, p. 19.
Spermophilus chrysodeirus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 84. Zoöl. Ser.
Citellus chrysodeirus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 106. Zoöl. Ser.

GOLDEN-NECK SPERMOPHILE.

1–6. Adult ♂ Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.
7–10. Adult ♀ Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.
11. Adult ♀ Coll. Ramshaw Meadows, Mt. Whitney, California. E. Heller.
12. Adult ♂ Coll. Little Cottonwood Meadows, Mt. Whitney, California. E. Heller.

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13–15. Adult ♀ Coll. Little Cottonwood Meadows, Mt. Whitney, California. E. Heller.
16. Adult ♂ Coll. Whitney Meadows, Mt. Whitney, California. E. Heller.
17–19. Adult ♀ Coll. Whitney Meadows, Mt. Whitney, California. E. Heller.
20–21. Adult ♂ Coll. Big Cottonwood Lakes, Mt. Whitney, California. E. Heller.
22–23. Adult ♂ Coll. Monache Meadows, Mt. Whitney, California. E. Heller.
24–25. Adult ♀ Coll. Monache Meadows, Mt. Whitney, California. E. Heller.
26. Adult ♀ Coll. Inyo Mts., summits E. of Lone Pine, California. E. Heller.
27. Adult ♂ P. Chaparral, Butte County, California. C. K. Worthern.
28. Adult ♀ P. Chaparral, Butte County, California. C. K. Worthern.
29. Adult ♀ P. Buck's Ranch, California. C. K. Worthern.
30. Adult ♂ P. Hermit Valley, California. W. W. Price.
31–34. Adult ♀ P. Hermit Valley, California. W. W. Price.
35–38. Adult ♂ P. Woodfords, Alpine County, California. W. W. Price.
39–44. Adult ♀ P. Woodfords, Alpine County, California. W. W. Price.
45–51. Adult ♂ P. Silver Lake, Amador County, California. W. W. Price.
52–58. Adult ♀ P. Silver Lake, Amador County, California. W. W. Price.
59–62. Adult ♂ P. Mount Siegel, Nevada. W. W. Price.
63–66. Adult ♀ P. Mount Siegel, Nevada. W. W. Price.
67–68. Adult ♂ P. Edgewood, Nevada. W. W. Price.
69–71. Adult ♀ P. Edgewood, Nevada. W. W. Price.
72. Adult ♀ P. Buck's Ranch, California. F. Stephens.
73. Adult ♀ P. Chaparral, Butte County, California. E. Adams.

a. Citellus chrysodeirus bernardinus (Merriam).
Spermophilus chrysodeirus brevicaudus Merr., Proc. Biol. Soc. Wash., VIII, 1893, p. 134. (nec Brandt, 1844.)
Spermophilus bernardinus Merr., Science, N. S., VIII, 1898, p. 782.
Spermophilus chrysodeirus bernardinus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 84. Zoöl. Ser.

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Citellus chrysodeirus bernardinus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 107. Zoöl. Ser.

SAN BERNARDINO SPERMOPHILE.

1–3. Adult ♂ P. Bear Valley, San Bernardino Mts., California. E. Heller.

4–9. Adult ♀ P. Bear Valley, San Bernardino Mts., California. E. Heller.

10. Adult ♂ P. Bluff Lake, San Bernardino Mts., California. E. Heller.

11–16. Adult ♀ P. Bluff Lake, San Bernardino Mts., California. E. Heller.

290. **Citellus wortmani** (Allen).

Tamias wortmani Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1895, p. 335.

Spermophilus wortmani Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 84. Zoöl. Ser.

Citellus wortmani Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 107. Zoöl. Ser.

WORTMAN'S SPERMOPHILE.

1–5. Adult ♂ Paratypes. Exch. Bitter Creek, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

6–13. Adult ♀ Paratypes. Exch. Bitter Creek, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

Subgenus E. Colobotis.

291. **Citellus parryi** (Richardson).

Arctomys parryii Richard., Append. Parry's Second Voy., 1825, p. 316.

Arctomys parryi var. *phœognatha* Richard., Faun. Bor. Amer., Mamm., I, 1829, p. 161.

Arctomys kennicottii Ross, Canad. Nat. & Geol., 1861, p. 434.

Spermophilus empetra Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 89. Zoöl. Ser. (nec Pallas.)

Citellus parryi Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 107. Zoöl. Ser.

PARRY'S SPERMOPHILE.

1–8. Adult ♂ P. Point Barrow, Alaska. E. A. McIlhenny.

9. Adult ♀ P. Point Barrow, Alaska. E. A. McIlhenny.

a. *Citellus parryi kadiacensis* (Allen).

Spermophilus parryi var. *kodiacensis* Allen, Proc. Bost. Soc. Nat. Hist., XVI, 1874, p. 292.

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Spermophilus empetra var. *kodiacensis* Allen, Mon. N. Am. Rodent., 1877, p. 839.

Spermophilus empetra kadiacensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 90, fig. 20. Zoöl. Ser.

Citellus parryi kadiacensis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 108. Zoöl. Ser.

KADIAK ISLAND SPERMOPHILE.

1–7. Adult ♂ Topotypes. Coll. Kadiak Island, Alaska. D. G. Elliot.

8–9. Adult ♀ Topotypes. Coll. Kadiak Island, Alaska. D. G. Elliot.

292. Citellus barrowensis (Merriam).

Spermophilus barrowensis Merr., Proc. Wash. Acad. Scien., II, 1900, p. 19. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 91. Zoöl. Ser.

Citellus barrowensis Elliot, Check L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 110. Zoöl. Ser.

BARROW'S SPERMOPHILE.

1–5. Adult ♂ Topotypes. P. Point Barrow, Alaska. E. A. McIlhenny.

6–7. Adult ♀ Topotypes. P. Point Barrow, Alaska. E. A. McIlhenny.

293. Citellus columbianus (Ord).

Arctomys columbianus Ord, Guth. Geogr., 2nd Am. ed., II, 1815, p. 292.

Spermophilus columbianus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 91. Zoöl. Ser.

Citellus columbianus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 111. Zoöl. Ser.

COLUMBIAN SPERMOPHILE.

1–4. Adult ♂ P. National Park, Alberta, Canada. G. F. Dippie.

5. Adult ♀ P. National Park, Alberta, Canada. G. F. Dippie.

6. Adult ♂ P. Calgary, Alberta, Canada. G. F. Dippie.

7. Adult ♂ P. Banff, Alberta, Canada. G. F. Dippie.

8. Adult ♀ P. Banff, Alberta, Canada. G. F. Dippie.

9. Adult ♂ P. Head of Shonsoup River, British Columbia, Canada. A. C. Brookes.

10. Adult ♀ P. Seattle, Washington. A. B. Kibbie.

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11. Adult ♂ P. Columbia Falls, Montana. C. K. Worthern.
12–13. Adult ♂ Pres. Kalispell, Montana. E. Heller.
14. Adult ♀ Exch. Moscow, Idaho. Am. Mus. Nat. Hist. N. Y. C. M. Warren.

294. Citellus richardsoni (Sabine).

Arctomys richardsonii Sabine, Trans. Linn. Soc., 1822, p. 589, pl. 28.

Arctomys (*Spermophilus*) *guttatus* Richard., Faun. Bor. Amer., Mamm., I, 1829, p. 162. (nec Temm.)

Spermophilus richardsoni Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 92. Zoöl. Ser.

Citellus richardsoni Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 111. Zoöl. Ser.

RICHARDSON'S SPERMOPHILE.

1. Adult ♂ P. Forks of Blindman and Red Deer Rivers, Alberta, Canada. G. F. Dippie.
2. Adult ♀ P. Forks of Blindman and Red Deer Rivers, Alberta, Canada. G. F. Dippie.
3. Adult ♂ P. Red Deer River, Alberta, Canada. G. F. Dippie.
4. Adult ♀ P. Red Deer River, Alberta, Canada. G. F. Dippie.

295. Citellus townsendi (Bachman).

Spermophilus townsendii Bachm., Jour. Acad. Nat. Scien. Phil., 1839, p. 61. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 92. Zoöl. Ser.

Citellus townsendi Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 111. Zoöl. Ser.

TOWNSEND'S SPERMOPHILE.

1. Juv. ♀ Exch. Walla Walla, Washington. Washington University. A. B. Kibbie.

296. Citellus armatus (Kennicott).

Spermophilus armatus Kennicott, Proc. Acad. Nat. Scien. Phil., 1863, p. 158. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 93. Zoöl. Ser.

Citellus armatus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 112. Zoöl. Ser.

ARMED SPERMOPHILE.

1–2. Adult ♂ P. Yellowstone Nat. Park, Montana. E. Thompson Seton.
3. Adult ♀ P. Yellowstone Nat. Park, Montana. E. Thompson Seton.

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297. Citellus elegans (Kennicott).

Spermophilus elegans Kennicott, Proc. Acad. Nat. Scien. Phil., 1863, p. 158. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 94. Zoöl. Ser.

Spermophilus richardsoni var. *townsendi* Allen, Mon. N. Am. Rod., 1877, p. 848. (nec Bachm.)

Citellus elegans Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 113. Zoöl. Ser.

ELEGANT SPERMOPHILE.

1–4. Adult ♂ Coll. Oakes, North Dakota. W. E. Snyder.
5–14. Adult ♀ Coll. Oakes, North Dakota. W. E. Snyder.
15–16. Adult ♂ Coll. Jamestown, North Dakota. W. E. Snyder.
17–19. Adult ♀ Coll. Jamestown, North Dakota. W. E. Snyder.
20. Adult ♂ Coll. Braddock, North Dakota. W. E. Snyder.
21. Adult ♂ Coll. Bottineau, North Dakota. W. E. Snyder.
22–26. Adult ♀ Coll. Bottineau, North Dakota. W. E. Snyder.
27–30. Adult ♂ Coll. Minot, North Dakota. W. E. Snyder.
31. Adult ♂ Exch. Bitter Creek, Montana. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
32–35. Adult ♀ Exch. Bitter Creek, Montana. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
36–37. Adult ♂ P. Blindman River, Alberta, Canada. G. F. Dippie.
38–40. Adult — P. Blindman River, Alberta, Canada. G. F. Dippie.
41. Adult — P. Red River, Alberta, Canada. G. F. Dippie.

298. Citellus beldingi (Merriam).

Spermophilus beldingi Merr., Ann. Acad. Nat. Scien. N. Y., IV, 1888, p. 317. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 94. Zoöl. Ser.

Citellus beldingi Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 113. Zoöl. Ser.

BELDING'S SPERMOPHILE.

1–3. Adult ♂ P. Pyramid Peak, California. W. W. Price.
4–13. Adult ♀ P. Pyramid Peak, California. W. W. Price.
14–15. Adult ♂ P. Hermit Valley, California. W. W. Price.
16–18. Adult ♀ P. Hermit Valley, California. W. W. Price.
19–25. Adult ♂ P. Silver Lake, California. W. W. Price.
26. Adult ♀ P. Silver Lake, California. W. W. Price.
27–37. Adult ♂ P. Bear Valley, California. A. Forrer.
38–41. Adult ♀ P. Bear Valley, California. A. Forrer.

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299. Citellus oregonus (Merriam).

Spermophilus oregonus Merr., Proc. Biol. Soc. Wash., XII, 1898, p. 69. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 94. Zoöl. Ser.

Citellus oregonus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 113. Zoöl. Ser.

OREGON SPERMOPHILE.

1–3. Adult ♂ P. Upper Klamath Lake, Oregon. A. Forrer.
4–6. Adult ♀ P. Upper Klamath Lake, Oregon. A. Forrer.

Subgenus F. **Otospermophilus.**

300. Citellus variegatus (Erxleben).

Sciurus variegatus Erxl., Syst. Regn. Anim., I, 1777, p. 421.

Citellus variegatus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 148, figs. 27, XXXI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 113. Zoöl. Ser.

FIG. XXVIII. CITELLUS (OTOSPERMOPHILUS) VARIEGATUS. LONG-TAILED SPERMOPHILE.

LONG-TAILED SPERMOPHILE.

1–2. Adult ♂ Coll. Patzcuaro, State of Michoacan, Mexico. F. E. Lutz.
3. Juv. ♀ Coll. Patzcuaro, State of Michoacan, Mexico. F. E. Lutz.
4. Adult ♂ Coll. Ocotlan, State of Jalisco, Mexico. F. E. Lutz.
5. Adult ♂ Exch. Zapotlan, State of Jalisco, Mexico. Am. Mus. Nat. Hist. N. Y. A. Buller.

a. Citellus variegatus grammurus (Say).

Sciurus grammurus Say, Long's Exp. Rocky Mts., II, 1823, p. 72.

Spermophilus macrourus Bennett, Proc. Zoöl. Soc., 1833, p. 41.

Spermophilus couchii Baird, N. Am. Mamm., 1857, p. 311, pl. 81.

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Spermophilus grammurus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 88, fig. 19. Zoöl. Ser. (Part.)

Citellus variegatus grammurus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 149. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 113. Zoöl. Ser.

BUSHY-TAILED SPERMOPHILE.

1–2. Adult ♂ P. Providentia Mines, State of Sonora, Mexico. J. Rowley.
3–4. Adult ♀ P. Providentia Mines, State of Sonora, Mexico. J. Rowley.
5. Adult ♂ P. Cerro Blanco, State of Sonora, Mexico. J. Rowley.
6–7. Adult ♀ P. Cerro Blanco, State of Sonora, Mexico. J. Rowley.
8–10. Adult ♂ P. Boulder, Colorado. R. T. Young.
11–13. Adult ♀ P. Boulder, Colorado. R. T. Young.
14. Adult ♂ P. Fremont County, Colorado. R. T. Young.
15. Adult ♀ P. Florida, Colorado. R. T. Young.
16. Adult ♂ P. Chiricahua Mts., Arizona. W. W. Price.
17. Adult ♀ P. Chiricahua Mts., Arizona. W. W. Price.
18. Adult ♂ P. Huachuca Mts., Arizona. W. W. Price.
19. Adult ♀ P. Huachuca Mts., Arizona. W. W. Price.
20. Adult ♂ P. Copper Cañon, Arizona. W. W. Price.
21. Adult ♂ P. Fort Verde, Arizona. W. W. Price.
22–23. Adult ♂ P. Pinal County, Arizona. W. W. Price.

b. Citellus variegatus beecheyi (Richardson).

Arctomys beecheyi Rich., Faun. Bor. Amer., Mamm., I, 1829, p. 170.

Sciurus (*Macroxus*) *californicus* Less., Mamm. & Ois. Nouv., 1847, p. 143.

Spermophilus grammurus beecheyi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 88. Zoöl. Ser.

Citellus variegatus beecheyi Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 114. Zoöl. Ser.

BEECHEY'S SPERMOPHILE.

1–3. Adult ♂ P. Alum Rock Park, Santa Clara County, California. W. W. Price.
4–6. Adult ♀ P. Alum Rock Park, Santa Clara County, California. W. W. Price.
7. Adult ♂ P. Pyramid Peak, Eldorado County, California. W. W. Price.
8. Adult ♂ P. Dulzura, California. W. W. Price.

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9. Adult ♂ P. Cedro Place, San Francis-quito Creek, California. G. A. Coleman.
10. Adult ♂ P. Carmel River, Monterey County, California. W. W. Price.
11–15. Adult ♂ P. Mount Hamilton, Santa Clara County, California. W. W. Price.
16–18. Adult ♀ P. Mount Hamilton, Santa Clara County, California. W. W. Price.
19–20. Juv. ♀ P. Mount Hamilton, Santa Clara County, California. W. W. Price.
21. Adult — P. California. Ward's Nat. Scien. Establ., Rochester, N. Y.
22. Adult ♂ P. Greenwood, Eldorado County, California. A. Forrer.
23. Adult ♀ P. Santa Cruz, California. A. Forrer.
24–28. Imm. — P. Oakland, California. A. Forrer.
29–31. Imm. — P. Big Trees, California. A. Forrer.

c. *Citellus variegatus fisheri* (Merriam).

Spermophilus beecheyi fisheri Merr., Proc. Biol. Soc. Wash., VIII, 1893, p. 133.

Spermophilus grammurus fisheri Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 88. Zoöl. Ser.

Citellus variegatus fisheri Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 150. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 114. Zoöl. Ser.

FISHER'S SPERMOPHILE.

1–4. Adult ♂ P. Anderson's Ranch, Douglas County, Nevada. W. W. Price.
5–7. Adult ♀ P. Anderson's Ranch, Douglas County, Nevada. W. W. Price.
8–11. Adult ♂ P. Mount Siegel, Douglas County, Nevada. W. W. Price.
12. Adult ♂ Coll. Hot Springs, Mount Whitney, California. E. Heller.
13. Adult ♀ Coll. Hot Springs, Mount Whitney, California. E. Heller.
14. Adult ♂ Coll. Lone Pine, Inyo County, California. E. Heller.
15–16. Adult ♀ Coll. Lone Pine, Inyo County, California. E. Heller.

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17–20. Adult ♂ Coll. Fort Tejon, mouth of Canada de las Uvas, California. E. Heller.

21–22. Adult ♀ Coll. Fort Tejon, mouth of Canada de las Uvas, California. E. Heller.

23. Adult ♂ Coll. Oro Grande, Mohave Desert, California. E. Heller.

24. Adult ♂ P. Elsinore, Riverside County, California. J. Rowley.

25. Adult ♂ P. Los Angeles, Riverside County, California. J. Rowley.

26–32. Adult ♀ P. Los Angeles, Riverside County, California. J. Rowley.

33–34. Adult ♂ Coll. Santa Eulalia, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

35–38. Adult ♀ Coll. Santa Eulalia, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

39. Adult ♂ Coll. San Antonio, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

40–41. Adult ♀ Coll. San Antonio, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

42–45. Adult ♂ Coll. Parral, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

46–48. Adult ♀ Coll. Parral, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

49. Adult ♂ Coll. Mattomi, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

50. Adult ♂ Coll. Trinidad, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

51–53. Adult ♂ Coll. La Grulla, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

54. Adult ♂ Coll. Vallecitos, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

55. Adult ♂ Coll. El Alamo, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

56–57. Adult ♂ Coll. San Matias Spring, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

58–59. Adult ♂ Coll. Hanson Lagoon, Hanson Laguna Mts., Lower California, Mexico. E. Heller.

60–61. Adult ♂ Coll. San Quentin, Lower California, Mexico. E. Heller.

62. Adult ♀ Coll. San Quentin, Lower California, Mexico. E. Heller.

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63. Adult ♂ Coll. Las Eucinas, Lower California, Mexico. E. Heller.

d. Citellus variegatus douglasi (Richardson).

Arctomys (*Spermophilus*) *douglasii* Richard., Faun. Bor. Amer., Mamm., I, 1829, p. 172.

Spermophilus grammurus douglasi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 89. Zoöl. Ser.

Citellus variegatus douglasi Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 115. Zoöl. Ser.

DOUGLAS'S SPERMOPHILE.

1. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
2–4. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.
5–6. Adult ♂ Coll. Eureka, California. E. Heller.
7. Adult ♀ Coll. Eureka, California. E. Heller.
8. Adult ♂ Coll. Petaluma, California. E. Heller.
9. Adult ♀ Coll. Petaluma, California. E. Heller.

e. Citellus variegatus buckleyi (Slack).

Spermophilus buckleyi Slack, Proc. Acad. Nat. Scien. Phil., 1861, p. 314.

Spermophilus grammurus buckleyi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 89. Zoöl. Ser.

Citellus variegatus buckleyi Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 115. Zoöl. Ser.

BUCKLEY'S SPERMOPHILE.

1. Adult — P. Waldo Co., Texas. S. Stert.

301. Citellus nesioticus Elliot.

Citellus nesioticus Elliot, Field Columb. Mus. Pub., III, 1904, p. 263. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 115. Zoöl. Ser.

ISLAND SPERMOPHILE.

1. Adult ♂ Type. P. Santa Catalina Island, California. J. Rowley.
2–3. Adult ♀ Paratypes. P. Santa Catalina Island, California. J. Rowley.

302. Citellus annulatus (Audubon & Bachman).

Spermophilus annulatus Aud. & Bachm., Jour. Acad. Nat. Scien. Phil., 1842, p. 319.

Citellus annulatus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 151. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 116. Zoöl. Ser.

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RING-TAILED SPERMOPHILE.

1. Adult ♂ Exch. Nogueras, State of Colima, Mexico. Am. Mus. Nat. Hist. N. Y. A. Buller.

Genus 105. **Cynomys. Prairie-dogs.**

Cynomys Rafin., Am. Month. Mag., II, 1817, p. 45. Type *Arctomys ludovicianus* Ord.

Anisonyx Rafin., Am. Month. Mag., II, 1817, p. 45. (nec Latreille, 1807, Coleopt.)

Monax Warden, Statist. Polit. Hist. Acc. U. S., I, 1819, pp. 225–228.

303. Cynomys ludovicianus (Ord).

Arctomys ludovicianus Ord, Guth. Geogr., 2nd Amer. ed., II, 1815, p. 292.

Cynomys socialis Rafin., Am. Month. Mag., II, 1817, p. 45.

Cynomys grisea Rafin., Am. Month. Mag., II, 1817, p. 45.

Arctomys missouriensis Warden, Desc. États Unis, V, 1820, p. 627.

Arctomys latrans Harlan, Faun. Am., 1825, p. 306.

Cynomys ludovicianus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 102, fig. 23. Zoöl. Ser. *Id.* Mamm. Middle Amer.

FIG. XXIX. CYNOMYS LUDOVICIANUS. PRAIRIE-DOG.

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& W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 155, figs. 28, XXXII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 117. Zoöl. Ser.

PRAIRIE-DOG. *Perrito, Perrito del Campo* in Mexico.

1. Adult ♂ P. Rockvale, Colorado. C. K. Mason.
2–4. Adult ♀ P. Rockvale, Colorado. C. K. Mason.
5. Adult ♂ P. Fremont County, Colorado. C. K. Mason.
6. Adult ♂ Exch. Pine Ridge Ind. Reserv., South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
7. Adult ♂ Exch. Neutral Strip, Indian Territory. Am. Mus. Nat. Hist. N. Y. Richardson.
8. Adult ♂ Exch. Beaver River, Oklahoma Territory. Am. Mus. Nat. Hist. N. Y. Richardson.
9–12. Adult — P. Group mounted. Ward's Nat. Scien. Establ., Rochester, N. Y.

304. Cynomys pyrrotrichus Elliot.

Cynomys pyrrotrichus Elliot, Proc. Biol. Soc. Wash., XVIII, 1905, p. 139.

RED PRAIRIE-DOG.

1–2. Adult ♂ Paratypes. Coll. White Horse Spring, Oklahoma Territory. T. Surber.
3–6. Adult ♀ Type & paratypes. Coll. White Horse Spring, Oklahoma Territory. T. Surber.

305. Cynomys arizonensis Mearns.

Cynomys arizonensis Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 305. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 104. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 154. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p 118. Zoöl. Ser.

ARIZONA PRAIRIE-DOG.

1. Adult ♀ Exch. Northern part of State of Sonora, Mexico. Am. Mus. Nat. Hist. N. Y. E. Robinette.
2. Adult — Exch. San Diego, State of Chihuahua, Mexico. Am. Mus. Nat. Hist. N. Y. E. Robinette.
3. Adult ♂ P. Huachuca Mountains, Arizona. Price & Condit.
4. Adult ♂ P. San Francisco Mountains, Arizona. F. Stephens.

306. Cynomys gunnisoni (Baird).

Spermophilus gunnisoni Baird, Proc. Acad. Nat. Scien. Phil., 1855, p. 334.

Cynomys gunnisoni Elliot, Syn. N. Am. Mamm., F. C. M. Pub.,

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II, 1901, p. 103. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 156. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 118. Zoöl. Ser.

GUNNISON'S PRAIRIE-DOG.

1–3. Adult ♂ P. Fremont County, Colorado. C. K. Mason.
4. Adult ♂ P. Boulder, Colorado. R. T. Young.
5. Adult ♂ Exch. Flagstaff, Arizona. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

Genus 106. **Marmota. Woodchucks.**

Marmota Frisch, Das Nat.-Syst. vierfüss. Thiere, in Tabellen, 9, Tab. Gen., 1775. Type ———?

Mus Linn., Syst. Nat., I, 1758, p. 60. (Part.)

Glis Erxleb., Syst. Regn. Anim., 1777, p. 358. (Part.)

Arctomys Schreb., Säugth., IV, 1782, pp. 721–743, pls. CCVII-CCXI, 1780.

Lipura Illig., Prodr. Syst. Mamm. et Av., 1811, p. 95.

307. Marmota monax (Linnæus).

Mus monax Linn., Syst. Nat., I, 1758, p. 60.

Arctomys monax Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 105, fig. 24. Zoöl. Ser.

Marmota monax Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 119. Zoöl. Ser.

WOODCHUCK.

1. Adult ♂ Exch. Hastings, New York. Am. Mus. Nat. Hist. N. Y. J. Rowley.
2. Adult ♀ Exch. Suffolk County, L. Island, New York. Am. Mus. Nat. Hist. N. Y.
3. Adult ♀ P. Marysville, West Virginia. T. Surber.
4. Adult ♀ Pres. Willow Springs, Illinois. W. J. Gerhard.
5. Adult ♂ Pres. Hicksville, Ohio. H. Meek.
6–7. Adult ♂ Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
8. Juv. ♂ Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
9–12. Adult — Group mounted. P. New York. Ward's Nat. Scien. Establ., Rochester, N. Y.
13. Adult — P. Saranac Lake, New York. Ward's Nat. Scien. Establ., Rochester, N. Y.

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14. Adult — Albino. Pres. ———? E. E. Ayer.
15. Adult ♀ Coll. Fox Lake, Illinois. L. Pray.

a. Marmota monax canadensis (Erxleben).
Glis canadensis Erxleb., Syst. Regn. Anim., 1777, p. 363.
Mus empetra Pallas, Nov. Spec. Quad. Glir. Ord., 1778, p. 75.
Arctomys melanopus Kuhl, Beitr. Zool., 1820, p. 64.
Arctomys monax canadensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 106. Zoöl. Ser.
Marmota monax canadensis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 120. Zoöl. Ser.
CANADIAN WOODCHUCK.
1–3. Adult ♂ Coll. Murray Bay, Province of Quebec, Canada. T. Surber.
4–7. Adult ♀ Coll. Murray Bay, Province of Quebec, Canada. T. Surber.

308. Marmota flaviventer (Audubon & Bachman).
Arctomys flaviventer Aud. & Bachm., Proc. Acad. Nat. Scien. Phil., 1841, p. 99. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 106. Zoöl. Ser.
Marmota flaviventer Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 120. Zoöl. Ser.
YELLOW-BELLIED WOODCHUCK.
1–2. Juv. ♂ P. Pyramid Peak, Eldorado County, California. W. W. Price.
3–4. Juv. ♀ P. Pyramid Peak, Eldorado County, California. W. W. Price.
5–6. Adult ♂ Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.
7–8. Adult ♀ Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.
9–13. Adult ♂ Coll. Ramshaw Meadows, Mt. Whitney, California. E. Heller.
14–16. Adult ♀ Coll. Ramshaw Meadows, Mt. Whitney, California. E. Heller.
17. Adult ♂ P. Echo Lake, Eldorado County, California. W. W. Price.
18. Adult ♂ P. Silver Lake, Amador County, California. W. W. Price.
19. Adult ♂ P. Boulder, Colorado. R. T. Young.
20. Adult ♀ P. Boulder, Colorado. R. T. Young.
21–22. Adult ♂ P. Midway, Kettle River, British Columbia, Canada. G. F. Dippie.

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23. Adult ♀ P. Midway, Kettle River, British Columbia, Canada. G. F. Dippie.
24. Adult ♀ P. Mt. Siegel, Douglas County, Nevada. W. W. Price.
25. Juv. ♂ P. Winter's Mine, Douglas County, Nevada. W. W. Price.
26. Adult ♀ P. Red Deer, Alberta, Canada. G. F. Dippie.
27. Adult ♂ P. Upper Klamath Lake, Oregon. A. Forrer.
28. Adult ♀ P. Upper Klamath Lake, Oregon. A. Forrer.
29–31. Juv. — P. Upper Klamath Lake, Oregon. A. Forrer.

309. Marmota olympus (Merriam).

Arctomys olympus Merr., Proc. Acad. Nat. Scien. Phil., 1898, p. 352. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 107. Zoöl. Ser.

Marmota olympus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 121. Zoöl. Ser.

OLYMPIC MOUNTAINS WOODCHUCK.

1–4. Adult ♂ Coll. Happy Lake, Olympic Mountains, Clallam County, Washington. D. G. Elliot.
5. Juv. ♂ Coll. Happy Lake, Olympic Mountains, Clallam County, Washington. D. G. Elliot.
6. Adult ♀ Coll. Happy Lake, Olympic Mountains, Clallam County, Washington. D. G. Elliot.
7. Adult ♀ Coll. Boulder Lake, Olympic Mountains, Clallam County, Washington. D. G. Elliot.

Subfamily III. **Pteromyinæ.**

Genus 107. **Sciuropterus. Flying Squirrels.**

Sciuropterus F. Cuv., Dents Mammifères, 1825, pp. 161–162, 225, pl. 56. Type *Sciurus volans* Linnæus.

310. Sciuropterus alpinus (Richardson).

Pteromys alpinus Rich., Zoöl. Jour., III, 1828, p. 519.

Pteromys sabrinus var. *β alpinus* Rich., Faun. Bor. Amer., Mamm., I, 1829, p. 195, pl. 16.

Sciuropterus volans alpinus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 109. Zoöl. Ser.

Sciuropterus alpinus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 121. Zoöl. Ser.

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RICHARDSON'S FLYING SQUIRREL.

1. Adult ♂ P. Alberta, Canada. G. F. Dippie.

a. Sciuropterus alpinus oregonensis (Bachman).

Pteromys oregonensis Bachm., Jour. Acad. Nat. Scien. Phil., 1839, p. 101.

Sciuropterus volans oregonensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 110. Zoöl. Ser.

Sciuropterus alpinus oregonensis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 122. Zoöl. Ser.

OREGON FLYING SQUIRREL.

1. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.

b. Sciuropterus alpinus olympicus Elliot.

Sciuropterus alpinus olympicus Elliot, Pub. Field Columb. Mus., I, 1899, p. 225. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 123. Zoöl. Ser.

Sciuropterus volans olympicus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 110. Zoöl. Ser.

OLYMPIC MOUNTAINS FLYING SQUIRREL.

1–2. Adult ♂ Type. Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

3. Adult ♀ Paratype. Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

4. Adult ♂ Coll. Boulder Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

c. Sciuropterus alpinus klamathensis Merriam.

Sciuropterus alpinus klamathensis Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 225. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 123. Zoöl. Ser.

Sciuropterus volans klamathensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 111. Zoöl. Ser.

KLAMATH FLYING SQUIRREL.

1. Adult ♀ P. Upper Klamath Lake, Oregon. A. Forrer.

d. Sciuropterus alpinus fuliginosus Rhoads.

Sciuropterus alpinus fuliginosus Rhoads, Proc. Acad. Nat. Scien. Phil., 1897, p. 321. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 123. Zoöl. Ser.

Sciuropterus volans fuliginosus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 111. Zoöl. Ser.

DUSKY FLYING SQUIRREL.

1. Adult ♂ Exch. Seattle, Washington. University of Washington. E. C. Starks.

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2. Adult ♀ P. Cariboo, British Columbia, Canada. C. K. Worthern.

311. Sciuropterus sabrinus (Shaw).

Sciurus hudsonius Gmel., Syst. Nat., I, 1788, p. 153. (nec Pallas.)
Sciurus sabrinus Shaw, Gen. Zoöl., I, 1801, p. 157.
Sciurus acrobates Wagn., Schreb. Säugth., Suppl., IV, 1843, p. 231, pl. CCXXII B.
Sciuropterus sabrinus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 107. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 124. Zoöl. Ser.

BOREAL FLYING SQUIRREL.

1. Adult ♀ Coll. Lake Edward, Province of Quebec, Canada. L. Kenkel.
2. Adult ♂ Coll. Trout Creek, Province of Ontario, Canada. L. Kenkel.
3. Adult ♀ Coll. Trout Creek, Province of Ontario, Canada. L. Kenkel.
4–5. Adult ♂ P. Gooderham, Province of Ontario, Canada. G. F. Dippie.
6–8. Adult ♀ P. Gooderham, Province of Ontario, Canada. G. F. Dippie.
9. Adult ♂ P. Portage la Prairie, Manitoba. G. F. Dippie.
10–11. Adult ♀ P. Portage la Prairie, Manitoba. G. F. Dippie.
12. Adult ♂ Pres. Canada! C. E. Akeley.

312. Sciuropterus nigripes Thomas.

Sciuropterus nigripes Thos., Ann. Mag. Nat. Hist., 6th Ser., XII, 1893, p. 30.

BLACK-FOOTED FLYING SQUIRREL.

1. Adult ♀ P. Palawan, Philippine Islands. E. Gerrard & Sons. A. Everett.

313. Sciuropterus volans (Linnæus).

Mus volans Linn., Syst. Nat., I, 1758, p. 63. (*Mus* nec *Sciurus*, p. 88.)
Sciurus volucella Pallas, Nov. Spec. Quad. Glir. Ord., 1778, p. 351.
Sciuropterus volans Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 109, fig. 25. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 158, figs. 29, XXXIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 125. Zoöl. Ser.

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FIG. XXX. SCIUROPTERUS VOLANS. COMMON FLYING SQUIRREL.

COMMON FLYING SQUIRREL.

1. Adult ♂ Exch. Millerplace, Long Island, New York. Am. Mus. Nat. Hist. N. Y. A. Helme.
2. Adult ♂ Exch. Ardsley, New York. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
3. Adult ♂ Exch. Highland Falls, New York. Am. Mus. Nat. Hist. N. Y. C. P. Streator.
4. Adult ♂ Coll. White Sulphur Springs, West Virginia. T. Surber.
5. Adult ♀ Coll. White Sulphur Springs, West Virginia. T. Surber.
6. Adult ♀ Exch. Raleigh, North Carolina. Am. Mus. Nat. Hist. N. Y. C. S. Brimley.
7. Adult ♀ Coll. Apex, North Carolina. T. Surber.

8–10. Adult ♂ Coll. Calhoun Falls, South Carolina. T. Surber.

11–13. Adult ♀ Coll. Calhoun Falls, South Carolina. T. Surber.

14. Adult ♀ Coll. St. Marys, Georgia. T. Surber.
15. Adult ♀ Pres. Willow Springs, Illinois. W. J. Gerhard.
16. Adult ♂ Pres. Laporte, Indiana. C. M. Barber.
17. Adult — Pres. Kankakee Marshes, Indiana. W. J. Wisdom.
18. Adult ♀ Exch. Ravenna, Ohio. Am. Mus. Nat. Hist. N. Y. C. P. Streator.
19. Adult ♀ P. Knoxville, Iowa. G. K. Cherrie.
20. Adult — Exch. New York. Am. Mus. Nat. Hist. N. Y.

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21–22. Adult — Group mounted. P. Ward's Nat. Scien. Establ., Rochester, N. Y.

23–26. Juv. — Group mounted. P. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Sciuropterus volans querceti Bangs.

Sciuropterus volans querceti Bangs, Proc. Biol. Soc. Wash., x, 1896, p. 166. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 109. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 126. Zoöl. Ser.

FLORIDA FLYING SQUIRREL.

1. Adult ♂ Coll. Enterprise, Florida. T. Surber.
2. Adult ♀ Coll. Enterprise, Florida. T. Surber.
3. Adult — Exch. Tarpon Springs, Florida. Am. Mus. Nat. Hist. N. Y. W. E. D. Scott.

Family III. **Haplodontidæ. Sewellels.**

Genus 108. **Haplodontia.**

Aplodontia (sic) Richard., Zoöl. Jour., IV, 1829, p. 334. Type *Aplodontia! leporina* Richardson = *Anisonyx rufa* Rafinesque.

Anisonyx Rafin., Am. Month. Mag., II, 1817, p. 45. (Part.)

314. Haplodontia rufa (Rafinesque).

Anisonyx rufa Rafin., Am. Month. Mag., II, 1817, p. 45.

Aplodontia! leporina Rich., Zoöl. Jour., IV, 1829, p. 335. *Id.* Faun. Bor. Amer., Mamm., I, 1829, p. 211, pl. 18c.

Haplodontia rufa Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 112. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 126. Zoöl. Ser.

RUFOUS SEWELLEL.

1–3. Adult ♂ Exch. Ravenna, Washington. Univ. of Washington. E. C. Starks.

4. Adult ♀ Exch. Ravenna, Washington. Univ. of Washington. E. C. Starks.

5. Adult — P. Tacoma, Washington. Ward's Nat. Scien. Establ., Rochester, N. Y.

315. Haplodontia pacifica (Merriam).

Aplodontia! pacifica Merr., Proc. Biol. Soc. Wash., XIII, 1899, p. 19.

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Haplodontia pacifica Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 114. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 127. Zoöl. Ser.

PACIFIC SEWELLEL.

1–2. Adult ♂ Coll. Gardiner, Oregon. E. Heller.
3–6. Adult ♀ Coll. Gardiner, Oregon. E. Heller.
7–12. Adult ♂ Coll. Florence, Oregon. E. Heller.
13–22. Adult ♀ Coll. Florence, Oregon. E. Heller.
23. Adult ♂ Coll. Agness, Oregon. E. Heller.
24. Adult — P. ——— ? Oregon. Ward's Nat. Scien. Establ., Rochester, N. Y.

316. Haplodontia phæa (Merriam).

Aplodontia! phæa Merr., Proc. Biol. Soc. Wash., XIII, 1899, p. 20.

Haplodontia phæa Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 114. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 127. Zoöl. Ser.

DARK SEWELLEL.

1–5. Adult ♂ Coll. Eureka, California. E. Heller.
6. Adult ♀ Coll. Eureka, California. E. Heller.
7–8. Adult ♂ Topotypes. Coll. Point Reyes, California. E. Heller.
9–10. Adult ♀ Topotypes. Coll. Point Reyes, California. E. Heller.
11. Adult ♀ Coll. Requa, California. E. Heller.
12–18. Adult ♀ Coll. Nicasio, California. E. Heller.
19. Adult ♂ Topotype. Exch. Point Reyes, California. Am. Mus. Nat. Hist. N. Y. C. A. Allen.

317. Haplodontia olympica (Merriam).

Aplodontia! olympica Merr., Proc. Biol. Soc. Wash., XIII, 1899, p. 20.

Haplodontia olympica Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 114. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 127. Zoöl. Ser.

OLYMPIC MOUNTAINS SEWELLEL.

1–4. Adult ♂ Coll. Happy Lake, Olympic Mountains, Clallam County, Washington. D. G. Elliot.
5. Juv. ♂ Coll. Happy Lake, Olympic Mountains, Clallam County, Washington. D. G. Elliot.
6–8. Adult ♀ Coll. Happy Lake, Olympic Mountains, Clallam County, Washington. D. G. Elliot.

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9. Adult ♀ Coll. Boulder Lake, Olympic Mountains, Clallam County, Washington. D. G. Elliot.
10. Adult ♂ Coll. Johnson's Ranch, Elwah River, Clallam County, Washington. D. G. Elliot.

Family IV. **Castoridæ. Beavers.**

Genus 109. **Castor.**

Castor Linn., Syst. Nat., I, 1758, p. 58. Type *Castor fiber* Linnæus.

318. Castor canadensis Kuhl.

Castor canadensis Kuhl, Beitr. Zool., 1820, p. 64. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 116, fig. 27. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 128. Zoöl. Ser.

CANADA BEAVER.

1. Adult — P. Canada. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♂ Coll. Iron County, Michigan. C. E. Akeley.
3. Adult ♀ Coll. Iron County, Michigan. C. E. Akeley.

4–6. Juv. — Coll. Iron County, Michigan. C. E. Akeley.

a. Castor canadensis frondator Mearns.

Castor canadensis frondator Mearns, Proc. U. S. Nat. Mus., 1897, p. 502. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 116. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 159, figs. 30, XXXIV. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 128. Zoöl. Ser.

SONORAN BEAVER.

1–4. Adult — Coll. Sabinas, State of Coahuila, Mexico. Heller & Barber.
5. Juv. — Coll. Sabinas, State of Coahuila, Mexico. Heller & Barber.

b. Castor canadensis pacificus Rhoads.

Castor canadensis pacificus Rhoads, Trans. Am. Philos. Soc., 1898, p. 422. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 117. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 129. Zoöl. Ser.

PACIFIC COAST BEAVER.

1. Adult — P. Kenai Peninsula, Alaska. C. F. Periolat.

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FIG. XXXI. CASTOR C. FRONDATOR. SONORAN BEAVER.

319. Castor fiber Linnæus.

Castor fiber Linn., Syst. Nat., I, 1758, p. 58.

BEAVER.

1. Adult — P. Germany. Ward's Nat. Scien. Establ., Rochester, N. Y.

Family V. **Muscardinidæ. Dormice.**

Subfamily I. **Muscardininæ.**

Genus 110. **Glis.**

Glis Briss., Reg. Anim., 2nd ed., 1762, pp. 13, 113, 118. Type *Glis glis* Brisson = *Sciurus glis* Linnæus.

Myoxus Zimm., Geog. Gesch. Mensch. vierfuss. Thiere, II, 1780, p. 351.

Myorus Reichenb., Bilderg. Thierw., Heft XVII, 1835, Taf. 65, fig. 8.

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320. Glis glis (Linnæus).

Sciurus glis Linn., Syst. Nat., I, 1766, p. 87.

LINNÆUS'S DORMOUSE.

1. Adult — P. Belgium. J. A. Loring.

321. Glis nitidula (Pallas).

Mus nitedula! Pall., Nov. Spec. Quad. Glir. Ord., 1778, p. 88.

Id. Zoogr. Rosso-Asiat., I, 1778, p. 179.

Myoxus dryas Schreb., Säugth., IV, 1787, p. 831, pl. 225B.

Myoxus nitela var. F. Cuv., Dict. Scien. Nat., 1823, p. 125.

OAK DORMOUSE.

1. Adult — P. Europe! Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 111. **Graphiurus.**

Graphiurus Smuts, Enum. Mamm. Cap., 1832, p. 32. F. Cuv., Hist. Nat. Mamm., VII, Tab. Gen. et Method., 1842, No. 254, p. 4. Type *Graphiurus capensis* Smuts=*Sciurus ocularis* A. Smith.

Graphyurus Blyth, in Cuv. Anim. Kingd., 1849, p. 111.

Graphidurus Wallace, Geog. Distr. Anim., II, 1876, p. 232.

322. Graphiurus hueti (Rochebrune).

Eliomys hueti Rochbr., Act. Soc. Linn. Bord., VII, 1883, p. 110, pl. 6, fig. 1.

Graphiurus natglasii Jentink, Notes Leyd. Mus., X, 1888, pp. 38, 39.

HUET'S DORMOUSE.

1. Adult — P. Gold Coast, West Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

Family VI. **Muridæ. Rats, Mice, Voles.**

Subfamily I. **Hydromyinæ.**

Genus 112. **Hydromys.**

Hydromys E. Geoff., Ann. Mus. Hist. Nat. Paris, VI, 1805, pp. 81–90, pls. 35–36. Type ———?

323. Hydromys chrysogaster E. Geoffroy.

Hydromys chrysogaster E. Geoff., Ann. Mus. Hist. Nat. Paris, VI, 1805, p. 88, pl. 36, fig. A.

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GOLDEN-BELLIED WATER RAT.

1. Adult — P. Victoria, New South Wales. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Hydromys chrysogaster leucogaster (E. Geoffroy).

Hydromys leucogaster E. Geoff., Ann. Mus. Hist. Nat. Paris, VI, 1805, p. 89, pl. 36, figs. B, C, D.

WHITE-BELLIED WATER RAT.

1. Adult — P. Victoria, New South Wales. Ward's Nat. Scien. Establ., Rochester, N. Y.

Subfamily II. **Gerbillinæ.**

Genus 113. **Meriones.**

Meriones Illig., Prodr. Syst. Mamm. et Av., 1811, p. 82. Type *Dipus meridianus* Gmelin. (By elimination.)

Rhombomys Wagn., Geleh. Anz. K. Bayer. Akad. Wiss., Münch., XII, 1841, No. 52, p. 421.

324. Meriones shawi (Rozet).

Gerbillus shawi Rozet, Voy. Rég. Alger, I, 1833, p. 248.

SHAW'S MOUSE.

1. Adult — P. ———— ? E. Gerrard & Sons.

Genus 114. **Psammomys.**

Psammomys Cretzschmar, in Rüppel's Atl. zur Reise nördl. Afrika, 1ste Abth., Zool., Heft XI, 1828, pp. 56–59, Tab. 22–23. Type *Psammomys obesus* Cretzschmar.

325. Psammomys obesus Cretzschmar.

Psammomys obesus Cretzs., Rüpp. Atl., 1828, p. 58, pl. 22. Lataste, Act. Soc. Linn. Bord., 1885, p. 269. *Id.* Expl. Tunis, 1887, p. 28.

FAT SAND RAT.

1. Adult — P. Damietta, Egypt. Ward's Nat. Scien. Establ., Rochester, N. Y.

Subfamily III. **Murinæ.**

Genus 115. **Mus.**

Mus Linn., Syst. Nat., I, 1758, p. 59. Type *Mus rattus* Linnæus.

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326. Mus rattus Linnæus.

Mus rattus Linn., Syst. Nat., I, 1758, p. 61. Elliot, Syn. N. Amer. Mamm., F. C. M. Pub., II, 1901, p. 117, fig. 28. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 163, figs. 31, XXXV. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 129. Zoöl. Ser.

BLACK RAT.

1–2. Adult ♂ P. White Sulphur Springs, West Virginia. T. Surber.
3–4. Adult ♀ P. White Sulphur Springs, West Virginia. T. Surber.
5. Adult ♀ Coll. Ship Island, Mississippi. F. E. Lutz.
6. Adult ♀ Exch. Princestown, Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
7. Adult ♂ P. Yucatan. G. F. Gaumer.
8–11. Adult ♂ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.
12–18. Adult ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.
19–21. Juv. ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.
22. Adult ♀ P. Boquete, Chiriqui, Costa Rica. J. H. Batty.

327. Mus norvegicus Erxleben.

Mus norvegicus Erxl., Syst. Reg. Anim., 1777, p. 381. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, Append., p. 428. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 164. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 129. Zoöl. Ser.

Mus decumanus Pall., Nov. Spec. Quad. Glir. Ord., 1778, p. 91. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 117. Zoöl. Ser.

NORWAY RAT.

1. Adult — Exch. New York City. Am. Mus. Nat. Hist. N. Y. G. Burns.
2. Adult ♂ Exch. Central Park, New York City. Am. Mus. Nat. Hist. N. Y.
3. Adult ♀ Exch. Millerplace, Long Island, N. Y. Am. Mus. Nat. Hist. N. Y. A. N. Helme.
4. Adult ♀ Coll. Murray Bay, Province of Quebec, Canada. T. Surber.
5. Adult ♀ Pres. Hyde Park, Chicago, Illinois. A. Ridgway.
6. Adult ♀ Exch. Long Island, Philips County, Kansas. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

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7. Adult ♀ Exch. Dominica, West Indies. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
8. Adult ♂ Coll. Central San Domingo. G. K. Cherrie.
9–13. Juv. ♀ Coll. Central San Domingo. G. K. Cherrie.
14. Adult ♀ Pres. Laporte, Indiana. C. M. Barber.
15. Adult ♂ P. Upsala, Sweden. J. A. Loring.
16–17. Adult — P. Mindanao, Philippines.

328. Mus alexandrinus I. Geoffroy.

Mus alexandrinus I. Geoff., Descrip. Égypte, II, 1813, p. 733, Atl. pl. V, fig. 1. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 118. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 164. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 129. Zoöl. Ser.

Brown Rat.

1. Adult ♀ Exch. Raleigh, North Carolina. Am. Mus. Nat. Hist. N. Y. H. H. & C. S. Brimley.
2. Adult ♀ Exch. Gainesville, Florida. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
3. Adult ♂ Exch. Enterprise, Florida. Am. Mus. Nat. Hist. N. Y. C. L. Brownell.
4. Adult ♂ Coll. Enterprise, Florida. T. Surber.
5. Adult ♂ Coll. Espanita, Anastasia Island, Florida. T. Surber.
6–7. Adult ♀ P. Cerro Blanco, State of Sonora, Mexico. J. Rowley.
8. Adult ♀ Exch. Trinidad, Cuba. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
9. Adult ♂ Coll. San Cristobal, San Domingo. G. K. Cherrie.
10. Adult ♀ Hybrid, *M. rattus* and *M. alexandrinus*. Coll. Catare, San Domingo. G. K. Cherrie.
11. Juv. ♀ Coll. Catare, San Domingo. G. K. Cherrie.
12. Adult ♂ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber.
13–14. Juv. ♂ Coll. Orizaba, State of Vera Cruz, Mexico. Heller & Barber.
15. Adult ♂ Coll. San Geronimo, State of Oaxaca, Mexico. Heller & Barber.

329. Mus rufescens Gray.

Mus rufescens Gray, Charlesw. Mag. Nat. Hist., I, 1837, p. 585. Bonhote, Proc. Zoöl. Soc., 1900, p. 878.

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Mus alexandrinus var. *rufescens* Thos., Proc. Zoöl. Soc., 1881, p. 534.

RUFOUS RAT.

1. Adult — P. South India! Ward's Nat. Scien. Establ., Rochester, N. Y.

330. Mus sylvaticus Linnæus.

Mus sylvaticus Linn., Syst. Nat., I, 1758, p. 62.

LONG-TAILED FIELD MOUSE.

1. Adult — P. Southern Europe! Ward's Nat. Scien. Establ., Rochester, N. Y.

331. Mus musculus Linnæus.

Mus musculus Linn., Syst. Nat., I, 1758, p. 62. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 118. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 162. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 130. Zoöl. Ser.

HOUSE MOUSE.

1–3. Adult ♂ P. Waterloo County, Province of Ontario, Canada. G. F. Dippie.

4–5. Adult ♀ P. Waterloo County, Province of Ontario, Canada. G. F. Dippie.

6. Adult ♀ Coll. Trout Creek, Province of Ontario, Canada. L. Kenkel.

7. Adult ♂ Exch. New York City. Am. Mus. Nat. Hist. N. Y.

8. Adult ♀ Exch. New York City. Am. Mus. Nat. Hist. N. Y.

9–11. Adult ♂ P. Jackson Park, Chicago, Illinois. W. Brandler.

12. Adult ♀ P. Jackson Park, Chicago, Illinois. W. Brandler.

13. Adult ♂ Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

14. Adult ♀ Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

15. Adult ♂ Coll. Venta Salada, State of Puebla, Mexico. F. E. Lutz.

16. Adult ♀ Coll. Venta Salada, State of Puebla, Mexico. F. E. Lutz.

17–18. Adult ♂ Coll. Puente de Ixtla, State of Morelos, Mexico. F. E. Lutz.

19–28. Adult ♂ Coll. Patzcuaro, State of Michoacan, Mexico. F. E. Lutz.

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29–34. Adult ♀ Coll. Patzcuaro, State of Michoacan, Mexico. F. E. Lutz.
35–42. Adult ♂ Coll. Ocotlan, State of Jalisco, Mexico. F. E. Lutz.
43–47. Adult ♀ Coll. Ocotlan, State of Jalisco, Mexico. F. E. Lutz.
48. Adult ♂ P. Providentia Mines, State of Sonora, Mexico. J. Rowley.
49. Adult ♂ Coll. Xico, State of Vera Cruz, Mexico. N. G. Buxton.
50. Adult ♂ Coll. Catare, San Domingo. G. K. Cherrie.
51–53. Adult ♀ Coll. Catare, San Domingo. G. K. Cherrie.
54. Adult — Pres. Andros Island, Bahamas. C. B. Cory.
55. Adult ♂ P. Fairbank, Arizona. W. W. Price.
56–57. Adult ♀ P. Fairbank, Arizona. W. W. Price.
58. Adult ♂ P. Show Low, Arizona. W. W. Price.
59–60. Adult ♀ P. Chiricahua Mountains, Arizona. W. W. Price.
61. Adult ♀ P. Wilcox, Arizona. W. W. Price.
62. Adult ♂ P. Greenhorn Mountains, Colorado. C. K. Mason.
63. Adult ♀ P. Fremont County, Colorado. C. K. Mason.
64–65. Adult ♀ P. Los Angeles, California. J. Rowley.
66. Adult ♀ P. Riverside, California. E. Heller.
67. Adult ♂ Coll. Daggett, California. E. Heller.
68. Adult ♂ Coll. Lone Pine, California. E. Heller.
69. Adult ♂ P. Snow Mountains, California. W. W. Price.
70. Adult ♂ P. Portola, California. W. W. Price.

Genus 116. **Uromys.**

Uromys Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1867, p. 343. Type *Mus macropus* Gray.

332. Uromys bruijni Peters & Doria.

Uromys bruijni Peters & Doria, Ann. Mus. Genov., VIII, 1876, p. 336; 1881, p. 704, pl. XVII.

BRUIJN'S RAT.

1. Adult — P. Mt. Gayata, Richardson Range, Queensland, Australia. E. Gerrard & Sons.

Genus 117. **Pogonomys.**

Pogonomys A. Milne-Edw., Compt. Rend., Paris, LXXXV, 1877, p. 1081. Type *Mus* (*Pogonomys*) *macrourus* A. Milne-Edwards.

Chiruromys Thos., Proc. Zoöl. Soc., 1888, p. 237, figs.

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Subgenus A. **Chiruromys.**

333. Pogonomys lamia Thomas.

Pogonomys lamia Thos., Ann. Mus. Genov., XVIII, 1897, p. 615.

SORCERER RAT.

1. Adult — P. Mt. Gayata, Richardson Range, Queensland, Australia. E. Gerrard & Sons.

Subfamily IV. **Cricetinæ.**

Genus 118. **Cricetus.**

Cricetus Leske, Anfangs. Naturg., I, 1779, p. 168. Type *Mus cricetus* Linnæus.

334. Cricetus cricetus (Linnæus).

Mus cricetus Linn., Syst. Nat., I, 1758, p. 60.

Cricetus frumentarius Pall., Zoog. Ross.-Asiat., I, 1811, p. 161.

Cricetus vulgaris Desm., Nouv. Dict. Hist. Nat., 1819, p. 168.

HAMSTER.

1. Adult ♂ P. Germany. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♀ P. Brunswick, Germany. J. A. Loring.
3. Juv. ♂ P. Brunswick, Germany. J. A. Loring.

4–7. Juv. ♀ P. Brunswick, Germany. J. A. Loring.

Genus 119. **Nesomys.**

Nesomys Peters, Sitzungsb. Gesell. Naturf. Freunde Berlin, 1870, p. 54. Type *Nesomys rufus* Peters.

335. Nesomys rufus Peters.

Nesomys rufus Peters, Sitzungsb. Gesell. Naturf. Freunde Berlin, 1870, p. 54.

RED MADAGASCAR RAT.

1. Adult ♂ P. Ampilambe, Madagascar. C. I. Forsyth-Major.

Genus 120. **Brachyuromys.**

Brachyuromys Forsyth-Major, Ann. Mag. Nat. Hist., 6th Ser., XVIII, 1896, p. 322. Type *Brachyuromys ramirohitra* Forsyth-Major.

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336. Brachyuromys ramirohitra Forsyth-Major.

Brachyuromys ramirohitra F.-Major, Ann. Mag. Nat. Hist., 6th Ser., XVIII, 1896, p. 322.

SHORT-TAILED MADAGASCAR RAT.

1. Adult ♂ P. Ampilambe, Madagascar. C. I. Forsyth-Major.

337. Brachyuromys betsileoensis (Bartlett).

Nesomys betsileoensis Bartlett, Proc. Zoöl. Soc., 1879, p. 770.

BETSILEO RAT.

1. Adult ♂ P. Madagascar. C. I. Forsyth-Major.

Genus 121. **Gymnuromys.**

Gymnuromys Forsyth-Major, Ann. Mag. Nat. Hist., 6th Ser., XVIII, 1896, p. 324. Type *Gymnuromys roberti* Forsyth-Major.

338. Gymnuromys roberti Forsyth-Major.

Gymnuromys roberti F.-Major, Ann. Mag. Nat. Hist., 6th Ser., XVIII, 1896, p. 324.

ROBERT'S MADAGASCAR RAT.

1. Adult ♀ P. Madagascar. C. I. Forsyth-Major.

Genus 122. **Eliurus.**

Eliurus A. Milne-Edwards, Ann. Scien. Nat. Paris, 6me. Sér., Zool., XX, 1885, Art. No. 1 bis, p. 1. Type *Eliurus myoxinus* A. Milne-Edwards.

339. Eliurus minor Forsyth-Major.

Eliurus minor F.-Major, Ann. Mag. Nat. Hist., 6th Ser., XVIII, 1896, p. 462.

SMALL MADAGASCAR RAT.

1. Adult ♀ P. Madagascar. C. I. Forsyth-Major.

340. Eliurus majori Thomas.

Eliurus majori Thos., Ann. Mag. Nat. Hist., 6th Ser., XVI, 1895, p. 164.

MAJOR'S MADAGASCAR RAT.

1. Adult ♂ P. Madagascar. C. I. Forsyth-Major.

341. Eliurus tanala Forsyth-Major.

Eliurus tanala F.-Major, Ann. Mag. Nat. Hist., 6th Ser., XVIII, 1896, p. 462.

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TANALA RAT.

1. Adult ♂ P. Madagascar. C. I. Forsyth-Major.

Genus 123. **Onychomys.**

Onychomys Baird, N. Am. Mamm., 1857, p. 458. Type *Hypudæus leucogaster* Maximilian.

Hypudæus Max., Reise N. Am., II, 1841, p. 99. (nec Auct.)

342. **Onychomys leucogaster** (Maximilian).

Hypudæus leucogaster Max., Reise N. Am., II, 1841, p. 99.

Mus missouriensis Aud. & Bach., Quad. N. Amer., II, 1851, p. 327, pl. 100.

Onychomys leucogaster Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 119, fig. 29. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905. p. 130. Zoöl. Ser.

WHITE-BELLIED MOLE MOUSE.

1–2. Adult ♂ Coll. Minot, North Dakota. W. E. Snyder.
3. Adult ♀ Coll. Minnewaukon, North Dakota. W. E. Snyder.
4. Adult ♂ P. Dickinson, North Dakota. G. K. Cherrie.
5. Adult ♀ Exch. Pendennis, Kansas. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
6. Adult ♂ Exch. Perch Rock County, Nebraska. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
7. Adult ♂ Exch. Mt. Beaver River, Indian Territory. Am. Mus. Nat. Hist. N. Y. J. Richardson.
8–9. Adult ♂ Coll. Alva, Oklahoma Territory. T. Surber.
10–14. Adult ♀ Coll. Alva, Oklahoma Territory. T. Surber.
15. Juv. ♂ Coll. White Horse Spring, Oklahoma Territory. T. Surber.
16–17. Adult ♂ Coll. Paladura Cañon, Texas. T. Surber.
18. Adult — P. Kansas. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. *Onychomys leucogaster brevicaudus* Merriam.

Onychomys leucogaster brevicaudus Merr., N. Am. Faun., No. 5, 1891, p. 52. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 120. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 130. Zoöl. Ser.

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SHORT-TAILED MOLE MOUSE.

1. Adult ♂ Exch. Bitter Creek, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

2–3. Adult ♀ Exch. Bitter Creek, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

a. Onychomys melanophrys pallescens Merriam.

Onychomys melanophrys pallescens Merr., N. Am. Faun., No. 3, 1890, p. 61. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 166. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 131. Zoöl. Ser.

Onychomys leucogaster pallescens Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 121. Zoöl. Ser.

PALE MOLE MOUSE.

1–2. Adult ♂ P. Holbrook, Arizona. W. W. Price.

3–4. Adult ♀ P. Holbrook, Arizona. W. W. Price.

343. Onychomys ramona Rhoads.

Onychomys ramona Rhoads, Amer. Nat., 1893, p. 833. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 121. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 167. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 132. Zoöl. Ser.

RAMONA MOLE MOUSE.

1–2. Adult ♀ P. Herron's Ranch, California. F. Stephens.

344. Onychomys torridus (Coues).

Hesperomys (*Onychomys*) *torridus* Coues, Proc. Acad. Nat. Scien. Phil., 1874, p. 183.

Onychomys torridus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 122. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 167, figs. 32, XXXVI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 133. Zoöl. Ser.

TROPICAL MOLE MOUSE.

1–3. Adult ♂ P. Fort Lowell, Arizona. W. W. Price.

4–8. Adult ♀ P. Fort Lowell, Arizona. W. W. Price.

9. Adult ♂ P. S-B. Ranch, Arizona. W. W. Price.

10–18. Adult ♂ P. Fairbank, Arizona. W. W. Price.

19–24. Adult ♀ P. Fairbank, Arizona. W. W. Price.

25. Adult ♀ P. Cerro Blanco, State of Sonora, Mexico. J. Rowley.

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345. Onychomys macrotis Elliot.

Onychomys macrotis Elliot, Pub. Field Columb. Mus., III, 1903, p. 155. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 169. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 134. Zoöl. Ser.

LARGE-EARED MOLE MOUSE.

1. Adult ♂ Coll. El Alamo, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
2. Adult ♀ Type. Coll. Head of San Antonio River, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
3. Adult ♀ Coll. Trinidad, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
4. Adult ♂ Coll. San Quentin, Lower California, Mexico. E. Heller.

346. Onychomys pulcher Elliot.

Onychomys pulcher Elliot, Pub. Field Columb. Mus., III, 1903, p. 243. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 134. Zoöl. Ser.

BEAUTIFUL MOLE MOUSE.

1–3. Adult ♂ Paratypes. Coll. Morongo Pass, San Bernardino Mts., California. E. Heller.
4–5. Adult ♀ Type and paratypes. Coll. Morongo Pass, San Bernardino Mts., California. E. Heller.
6. Adult ♂ Coll. Burn's Cañon, California. E. Heller.
7. Adult ♀ Coll. Burn's Cañon, California. E. Heller.
8. Adult ♂ Coll. Daggett, California. E. Heller.
9. Adult ♂ Coll. Lane's Mill, California. E. Heller.
10. Adult ♂ Coll. Warren's Well, California. E. Heller.
11. Juv. ♂ Coll. Arab Spring, Coso Mts., California. E. Heller.
12. Juv. ♀ Coll. Arab Spring, Coso Mts., California. E. Heller.
13. Adult ♂ Coll. Lone Pine, Inyo County, California. E. Heller.

Genus 124. **Peromyscus. Field Mice.**

Peromyscus Gloger, Hand-u. Hilfsb. Naturg., I, 1841, pp. XXX, 95. Type *Peromyscus arboreus* Gloger = *Mus sylvaticus noveboracensis* Fischer.

Calomys Aud. & Bach., Quad. N. Amer., II, 1851, p. 303. (nec Waterhouse, 1837).

Sitomys Fitzing., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien, LVI, 1867, p. 97.

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Vesperimus Coues, Proc. Acad. Nat. Scien. Phil., 1874, p. 178.
Baiomys True, Proc. U. S. Nat. Mus., XVI, 1894, p. 758.
Trinodontomys Rhoads, Proc. Acad. Nat. Scien. Phil., 1894, p. 257.
Haplomylomys Osgood, Proc. Biol. Soc. Wash., XVII, 1904, p. 53.

Subgenus A. Baiomys.

347. Peromyscus taylori (Thomas).

Hesperomys taylori Thos., Ann. Mag. Nat. Hist., 5th Ser., XIX, 1887, p. 66.

Peromyscus taylori Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 141. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 135. Zoöl. Ser.

TAYLOR'S MOUSE.

1. Adult ♂ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
2. Adult ♂ Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

a. *Peromyscus musculus brunneus* Allen & Chapman.

Peromyscus musculus brunneus Allen & Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 203. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 176. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 136. Zoöl. Ser.

JALAPA BROWN MOUSE.

1. Adult ♂ Exch. Jalapa, State of Vera Cruz, Mexico. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
2. Adult ♀ Coll. Patzcuaro, State of Michoacan, Mexico. F. E. Lutz.

3–7. Adult ♂ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.

8–10. Adult ♀ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.

Subgenus B. Haplomylomys.

348 Peromyscus eremicus (Baird).

Hesperomys eremicus Baird, N. Am. Mamm., 1857, p. 479.

Peromyscus eremicus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 136. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 191. Zoöl. Ser. *Id.*

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Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 136. Zoöl. Ser.

DESERT MOUSE.

1. Adult ♂ P. Big Lagrina, Colorado Desert, California. F. Stephens.
2. Adult ♀ P. New River, Colorado Desert, California. F. Stephens.
3. Adult ♂ P. Fairbank, Arizona. W. W. Price.
4–12. Adult ♂ Coll. Palm Springs, California. E. Heller.
13–19. Adult ♀ Coll. Palm Springs, California. E. Heller.
20–24. Adult ♂ Coll. Whitewater, California. E. Heller.
25–27. Adult ♀ Coll. Whitewater, California. E. Heller.
28–34. Adult ♂ Coll. Morongo Pass, California. E. Heller.
35–40. Adult ♀ Coll. Morongo Pass, California. E. Heller.
41. Adult ♂ Coll. Warren's Well, California. E. Heller.
42. Adult ♀ Coll. Warren's Well, California. E. Heller.
43. Adult ♂ Coll. Daggett, California. E. Heller.
44. Adult ♀ Coll. Furnace Creek, California. E. Heller.
45–47. Adult ♂ Coll. Furnace Creek, California. E. Heller.
48–49. Adult ♂ Coll. Oro Grande, California. E. Heller.
50–51. Adult ♂ P. La Puerta, San Diego County, California. F. Stephens.
52–53. Adult ♀ P. La Puerta, San Diego County, California. F. Stephens.
54–55. Adult ♂ P. San Felipe Cañon, San Diego County, California. F. Stephens.
56. Adult ♂ P. San Felipe Valley, San Diego County, California. F. Stephens.
57. Adult ♂ P. Vallecito, California. F. Stephens.
58. Adult ♂ P. Jacumba, California. F. X. Holzner.
59–66. Adult ♂ Coll. Cañon Esperanza, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
67–70. Adult ♂ Coll. San Matias Spring, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
71–75. Adult ♀ Coll. San Matias Spring, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
76. Adult ♀ Coll. Head of San Antonio River, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
77–78. Adult ♂ Coll. Rosarito Divide, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
79–80. Adult ♀ Coll. Rosarito Divide, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

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81–82. Adult ♂ Coll. Mattomi, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

83–84. Adult ♀ Coll. Mattomi, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

85. Adult ♂ Coll. Palomar, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

86–87. Adult ♂ Coll. Parral, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

88–89. Adult ♀ Coll. Parral, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

90. Adult ♂ P. Cerro Blanco, State of Sonora, Mexico. J. Rowley.

91–92. Adult ♀ P. Cerro Blanco, State of Sonora, Mexico. J. Rowley.

93–100. Adult ♂ P. Providentia Mines, State of Sonora, Mexico. J. Rowley.

101–103. Adult ♀ P. Providentia Mines, State of Sonora, Mexico. J. Rowley.

104–108. Adult ♂ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

109–111. Adult ♀ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

112. Adult ♂ Coll. Trinidad, Lower California, Mexico. E. Heller.

349. Peromyscus anthonyi (Merriam).

Hesperomys anthonyi Merr., Proc. Biol. Soc. Wash., IV, 1887, p. 5.

Peromyscus anthonyi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 141. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 185. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 137. Zoöl. Ser.

ANTHONY'S MOUSE.

1. Adult ♀ Exch. Fort Verde, California. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

350. Peromyscus californicus (Gambel).

Mus californicus Gambel, Proc. Acad. Nat. Scien. Phil., 1848, p. 78.

Peromyscus californicus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 137. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 203. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 137. Zoöl. Ser.

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CALIFORNIA MOUSE.

1–129. Adult ♂ P. Portola, San Mateo County, California. W. W. Price.

130–222. Adult ♀ P. Portola, San Mateo County, California. W. W. Price.

223–279. Adult ♂ P. Alum Rock Park, Santa Clara County, California. W. W. Price.

280–340. Adult ♀ P. Alum Rock Park, Santa Clara County, California. W. W. Price.

341–352. Adult ♂ P. Mount Hamilton, Santa Clara County, California. W. W. Price.

353–355. Adult ♀ P. Mount Hamilton, Santa Clara County, California. W. W. Price.

356–362. Adult ♂ P. Carmel River, Monterey County, California. W. W. Price.

363–366. Adult ♀ P. Carmel River, Monterey County, California. W. W. Price.

367. Adult ♂ P. Pescadero, San Mateo County, California. E. Heller.

368. Adult — P. Big Basin, California. G. A. Coleman.

369. Adult — P. La Honda, California. G. A. Coleman.

370. Juv. — P. San Lorenzo Creek, California. G. A. Coleman.

Subgenus C. Peromyscus.

351. Peromyscus metallicola Elliot.

Peromyscus metallicola Elliot, Pub. Field Columb. Mus., III, 1903, p. 245. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 192. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 138. Zoöl. Ser.

MINE HAUNTING MOUSE.

1–5. Adult ♂ Type and paratypes. P. Providentia Mines, State of Sonora, Mexico. J. Rowley.

6–7. Adult ♀ Paratypes. P. Providentia Mines, State of Sonora, Mexico. J. Rowley.

352. Peromyscus niveiventris (Chapman).

Hesperomys niveiventris Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1889, p. 117.

Peromyscus niveiventris Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 141. Zoöl. Ser. *Id.* Check-L. Mamm. N.

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Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 138. Zoöl. Ser.

WHITE-BELLIED MOUSE.

1–2. Adult ♂ Exch. Jupiter Inlet, Florida. Am. Mus. Nat. Hist. N. Y. C. L. Brownell.

3. Adult ♀ Exch. Jupiter Inlet, Florida. Am. Mus. Nat. Hist. N. Y. C. L. Brownell.

4–5. Juv. ♂ Exch. Jupiter Inlet, Florida. Am. Mus. Nat. Hist. N. Y. C. L. Brownell.

6. Adult ♂ Coll. Oak Lodge, Florida. T. Surber.

7. Adult — Coll. Oak Lodge, Florida. T. Surber.

8. Adult ♂ Coll. Opp. Micco, Florida. T. Surber.

9. Adult — Coll. Opp. Micco, Florida. T. Surber.

a. Peromyscus niveiventris phasma (Bangs).

Peromyscus phasma Bangs, Proc. Bost. Soc. Nat. Hist., 1898, p. 199. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 142. Zoöl. Ser.

Peromyscus niveiventris phasma Elliot, Pub. Field Columb. Mus., III, 1901, p. 41. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 138. Zoöl. Ser.

ANASTASIA ISLAND MOUSE.

1–11. Adult ♂ Coll. Espanita, Anastasia Island, Florida. T. Surber.

12–25. Adult ♀ Coll. Espanita, Anastasia Island, Florida. T. Surber.

353. Peromyscus subgriseus (Chapman).

Sitomys subgriseus Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 340.

Peromyscus subgriseus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 142. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 139. Zoöl. Ser.

CHAPMAN'S MOUSE.

1–7. Adult ♂ Topotypes. Coll. Gainesville, Florida. T. Surber.

8–11. Adult ♀ Topotypes. Coll. Gainesville, Florida. T. Surber.

354. Peromyscus hemionotis Elliot.

Peromyscus hemionotis Elliot, Pub. Field Columb. Mus., III, 1903, p. 157. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 199. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 139. Zoöl. Ser.

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MULE-EARED MOUSE.

1. Adult ♂ Type. Coll. Rosarito Divide, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

355. Peromyscus oresterus Elliot.

Peromyscus oresterus Elliot, Pub. Field Columb. Mus., III, 1903, p. 159. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 200. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 139. Zoöl. Ser.

MOUNTAIN LOVING MOUSE.

1–8. Adult ♂ Paratypes. Coll. Vallecitos, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

9–12. Adult ♀ Type and paratypes. Coll. Vallecitos, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

13. Adult ♂ Coll. Aguaje de las Fresas, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

14. Adult ♀ Coll. Aguaje de las Fresas, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

15–19. Adult ♂ Coll. Hanson Lagoon, Hanson Laguna Mts., Lower California, Mexico. E. Heller.

20. Adult ♀ Coll. Hanson Lagoon, Hanson Laguna Mts., Lower California, Mexico. E. Heller.

356. Peromyscus leucopus (Rafinesque).

Mus agrarius americanus Kerr, Anim. Kingd., I, 1792, p. 231. (nec Kerr, 1792.)

Musculus leucopus Rafin., Am. Month. Mag., III, 1818, p. 446.

Peromyscus americanus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 124, fig. 30. Zoöl. Ser.

Peromyscus leucopus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, Suppl., p. 492. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 140. Zoöl. Ser.

WHITE-FOOTED DEER MOUSE.

1. Adult ♂ Exch. Hastings, N. Y. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

2. Adult ♀ Exch. Hastings, N. Y. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

3–4. Adult ♂ Exch. Nyack, N. Y. Am. Mus. Nat. Hist. N. Y. C. L. Brownell.

5–6. Adult ♀ Exch. Nyack, N. Y. Am. Mus. Nat. Hist. N. Y. C. L. Brownell.

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7. Adult ♀ Exch. Millerplace, Suffolk Co., Long Island, N. Y. Am. Mus. Nat. Hist. N. Y. A. H. Helme.
8. Adult ♀ Exch. Stamford, N. Y. Am. Mus. Nat. Hist. N. Y. W. Dutcher.
9. Adult ♂ Exch. Nordhoff, New Jersey. Am. Mus. Nat. Hist. N. Y. Richardson.
10. Adult ♀ Exch. Hackensack Marsh, New Jersey. Am. Mus. Nat. Hist. N. Y. Chapman & Granger.
11. Adult ♀ Exch. Fairview, New Jersey. Am. Mus. Nat. Hist. N. Y. Chapman & Granger.
12. Adult ♂ P. White Sulphur Springs, West Virginia. T. Surber.
13. Adult ♀ P. White Sulphur Springs, West Virginia. T. Surber.
14–16. Adult ♂ Pres. White Sulphur Springs, West Virginia. T. Surber.
17–19. Adult ♀ Pres. White Sulphur Springs, West Virginia. T. Surber.
20. Juv. ♀ Pres. White Sulphur Springs, West Virginia. T. Surber.
21–23. Adult ♂ Coll. Black Mountain, West Virginia. T. Surber.
24–25. Adult ♀ Coll. Black Mountain, West Virginia. T. Surber.
26–32. Adult ♂ Pres. Hicksville, Ohio. S. E. Meek.
33–34. Adult ♀ Pres. Hicksville, Ohio. S. E. Meek.
35. Juv. ♂ Exch. Camp Douglas, Wisconsin. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
36. Juv. ♀ Exch. Camp Douglas, Wisconsin. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
37. Adult ♀ Exch. Camp Douglas, Wisconsin. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
38–40. Adult ♂ Exch. Weaverville, North Carolina. Am. Mus. Nat. Hist. N. Y. J. S. Cairns.
41. Adult ♀ Exch. Raleigh, North Carolina. Am. Mus. Nat. Hist. N. Y. H. H. Brimley.
42. Adult ♂ P. Knoxville, Iowa. G. K. Cherrie.
43–45. Adult ♂ Pres. Laporte, Indiana. C. M. Barber.
46–47. Adult ♀ Pres. Laporte, Indiana. C. M. Barber.
48. Adult — Pres. Mitchell, Indiana. S. E. Meek.
49–51. Adult ♂ P. Park Siding, Iron County, Michigan. C. Brandler.

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52–53. Adult ♀ P. Park Siding, Iron County, Michigan. C. Brandler.
54. Adult ♀ Exch. Syracuse, New York. Am. Mus. Nat. Hist. N. Y. M. M. Green.

a. Peromyscus leucopus noveboracensis (Fischer).
Mus sylvaticus noveboracensis Fischer, Syn. Mamm., 1829, p. 318.
Cricetus myoides Gapper, Zoöl. Jour., v, 1830, p. 204, pl. x.
Peromyscus leucopus myodes Rhoads, Proc. Acad. Nat. Scien. Phil., 1897, p. 27.
Peromyscus americanus noveboracensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 125. Zoöl. Ser.
Peromyscus leucopus noveboracensis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 140. Zoöl. Ser.

NORTHERN WHITE-FOOTED DEER MOUSE.
1. Juv. ♂ Coll. Gravenhurst, Ontario, Canada. L. Kenkel.

b. Peromyscus leucopus deserticola (Mearns).
Hesperomys leucopus deserticolus Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 285.
Peromyscus americanus deserticolus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 125. Zoöl. Ser.
Peromyscus texensis deserticola Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 188. Zoöl. Ser.
Peromyscus leucopus deserticola Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 140. Zoöl. Ser.

DESERT WHITE-FOOTED MOUSE.
1–7. Adult ♂ Coll. Morongo Pass, California. E. Heller.
8–12. Adult ♀ Coll. Morongo Pass, California. E. Heller.
13. Adult ♂ Coll. Banning, California. E. Heller.
14. Adult ♀ Coll. Banning, California. E. Heller.
15. Adult ♂ Coll. Victor, California. E. Heller.
16. Adult ♂ Coll. Whitewater, California. E. Heller.
17–19. Adult ♂ Pres. Bear Valley, California. E. Heller.
20–21. Adult ♀ Pres. Bear Valley, California. E. Heller.
22. Adult ♂ Pres. Little Bear Valley, California. E. Heller.
23. Adult ♀ Pres. San Bernardino Mts., California. E. Heller.
24. Adult ♂ Pres. San Bernardino Mts., California. E. Heller.

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25. Adult ♀ Pres. Julian, California. E. Heller.
26. Adult ♂ Pres. Bluff Lake, California. E. Heller.
27. Adult ♀ Pres. Bluff Lake, California. E. Heller.
28. Adult ♂ Pres. Riverside, California. E. Heller.
29. Adult ♀ Pres. Riverside, California. E. Heller.
30–32. Adult ♂ Coll. Palm Springs, California. E. Heller.
33–34. Adult ♀ Coll. Palm Springs, California. E. Heller.
35. Adult ♀ Coll. Warren's Well, San Bernardino Mts., California. E. Heller.
36. Adult ♂ Coll. Warren's Well, San Bernardino Mts., California. E. Heller.
37. Adult ♂ Coll. Burn's Cañon, San Bernardino Mts., California. E. Heller.
38–43. Adult ♂ Coll. Oro Grande, California. E. Heller.
44. Adult ♀ Coll. Oro Grande, California. E. Heller.
45–49. Adult ♂ Coll. Coal Kilns, Panamint Mts., California. E. Heller.
50. Adult ♀ Coll. Coal Kilns, Panamint Mts., California. E. Heller.
51. Adult ♂ Coll. Wild Rose Spring, Panamint Mts., California. E. Heller.
52–61. Adult ♂ Coll. Hannopee Cañon, Panamint Mts., California. E. Heller.
62–69. Adult ♀ Coll. Hannopee Cañon, Panamint Mts., California. E. Heller.
70. Adult ♂ Coll. Monachee Meadows, Mt. Whitney, California. E. Heller.
71–72. Adult ♀ Coll. Monachee Meadows, Mt. Whitney, California. E. Heller.
73. Adult ♀ Coll. Whitney Creek, Mt. Whitney, California. E. Heller.
74. Adult ♂ Coll. Whitney Meadows, Mt. Whitney, California. E. Heller.
75–82. Adult ♂ Coll. Hot Springs, Mt. Whitney, California. E. Heller.
83–86. Adult ♀ Coll. Hot Springs, Mt. Whitney, California. E. Heller.
87–93. Adult ♂ Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.
94. Adult ♀ Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.

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95. Juv. ♀ Coll. Big Cottonwood Lakes, Mt. Whitney, California. E. Heller.
96–97. Adult ♂ Coll. Beveridge Cañon, Inyo Mts., California. E. Heller.
98–100. Adult ♀ Coll. Beveridge Cañon, Inyo Mts., California. E. Heller.
101–102. Adult ♂ Coll. Coso Mountains, California. E. Heller.
103–105. Adult ♂ Coll. Inyo Mountain, summits E. of Lone Pine, California. E. Heller.
106–110. Adult ♀ Coll. Inyo Mountain, summits E. of Lone Pine, California. E. Heller.
111–117. Adult ♂ Coll. Lone Pine, Owens Valley, California. E. Heller.
118–122. Adult ♀ Coll. Lone Pine, Owens Valley, California. E. Heller.
123–128. Adult ♂ Coll. Fort Tejon, mouth of Cañada de las Uvas, California. E. Heller.
129–132. Adult ♀ Coll. Fort Tejon, mouth of Cañada de las Uvas, California. E. Heller.
133–136. Adult ♂ Coll. Fort Tejon, California. E. Heller.
137–138. Adult ♂ Coll. Piru Creek, Bailey's Ranch, California. E. Heller.
139–140. Adult ♀ Coll. Piru Creek, Bailey's Ranch, California. E. Heller.
141–142. Adult ♂ Coll. Lockwood Valley, Mount Pinos, California. E. Heller.
143–144. Adult ♀ Coll. Lockwood Valley, Mount Pinos, California. E. Heller.
145–146. Adult ♂ Coll. Neenach, California. E. Heller.
147–148. Adult ♀ Coll. Neenach, California. E. Heller.
149. Adult ♂ P. Cameron Lake, Colorado Desert, California. F. Stephens.
150. Adult ♂ Pres. Sorrento, California. E. Heller.

c. *Peromyscus leucopus arizonæ* (Allen).

Sitomys americanus arizonæ Allen, Bull. Am. Mus Nat. Hist. N. Y., 1894, p. 321.

Peromyscus americanus arizonæ Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 125. Zoöl. Ser.

Peromyscus texensis arizonæ Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 186. Zoöl. Ser.

Peromyscus leucopus arizonæ Elliot, Syn. N. Am. Mamm., F. C.

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M. Pub., II, 1901, Suppl., p. 492. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 140. Zoöl. Ser.

ARIZONA WHITE-FOOTED DEER MOUSE.

1–13. Adult ♂ P. Fairbank, Arizona. W. W. Price.
14–21. Adult ♀ P. Fairbank, Arizona. W. W. Price.
22–23. Adult ♂ P. S–B. Ranch, Arizona. W. W. Price.
24–26. Adult ♀ P. S–B. Ranch, Arizona. W. W. Price.
27–40. Juv. ♂ P. S–B. Ranch, Arizona. W. W. Price.
41–43. Juv. ♀ P. S–B. Ranch, Arizona. W. W. Price.
44. Adult — P. S–B. Ranch, Arizona. W. W. Price.
45. Adult ♀ P. Gouteras, State of Sonora, Mexico. B. C. Condit.

d. Peromyscus leucopus minnesotæ Mearns.

Peromyscus leucopus minnesotæ Mearns, Proc. Biol. Soc. Wash., XIV, 1901, p. 154. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 141. Zoöl. Ser.

MINNESOTA WHITE-FOOTED DEER MOUSE.

1–2. Adult ♀ Topotypes. Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
3. Juv. ♀ Topotype. Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

357. Peromyscus sonoriensis (Le Conte).

Hesperomys sonoriensis Le Conte, Proc. Acad. Nat. Scien. Phil., 1853, p. 413.

Peromyscus americanus sonoriensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 125. Zoöl. Ser.

Peromyscus leucopus sonoriensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, Suppl., p. 492. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 181, fig. XXXVII. Zoöl. Ser.

Peromyscus sonoriensis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 141. Zoöl. Ser.

SONORA WHITE-FOOTED FIELD MOUSE.

1–24. Adult ♂ P. Woodfords, Alpine County, California. W. W. Price.
25–46. Adult ♀ P. Woodfords, Alpine County, California. W. W. Price.
47. Adult ♂ P. Blue Lake, Alpine County, California. W. W. Price.
48. Adult ♀ P. Blue Lake, Alpine County, California. W. W. Price.

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49–135. Adult ♂ P. Mount Siegel, Douglas County, Nevada. W. W. Price.

136–238. Adult ♀ P. Mount Siegel, Douglas County, Nevada. W. W. Price.

239. Adult ♀ P. Echo, Colorado County, California. W. W. Price.

240–255. Adult ♂ P. Winters Mine, Douglas County, Nevada. W. W. Price.

256–262. Adult ♀ P. Winters Mine, Douglas County, Nevada. W. W. Price.

263. Adult ♂ P. Edgewood, Douglas County, Nevada. W. W. Price.

264–265. Adult ♀ P. Edgewood, Douglas County, Nevada. W. W. Price.

266–273. Adult ♂ P. Anderson's Ranch, Douglas County, Nevada. W. W. Price.

274–280. Adult ♀ P. Anderson's Ranch, Douglas County, Nevada. W. W. Price.

281–290. Adult ♂ P. Holbrook, Arizona. W. W. Price.

291–292. Adult ♀ P. Show Low, Arizona. W. W. Price.

a. Peromyscus sonoriensis fulvus Osgood.

Peromyscus sonoriensis fulvus Osgood, Proc. Biol. Soc. Wash., XVII, 1904, p. 57. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 142. Zoöl. Ser.

Peromyscus leucopus fulvus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 183. Zoöl. Ser.

FULVOUS FIELD MOUSE.

1–12. Adult ♂ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber.

13–20. Adult ♀ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber.

358. Peromyscus labecula Elliot.

Peromyscus labecula Elliot, Pub. Field Columb. Mus., III, 1903, p. 143. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 178. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 142. Zoöl. Ser.

WHITE-SPOT FIELD MOUSE.

1–11. Adult ♂ Type and paratypes. Coll. Ocotlan, State of Jalisco, Mexico. F. E. Lutz.

12–25. Adult ♀ Paratypes. Coll. Ocotlan, State of Jalisco, Mexico. F. E. Lutz.

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26. Juv. — Paratype. Coll. Ocotlan, State of Michoacan, Mexico. F. E. Lutz.
27. Adult ♂ Coll. Patzcuaro, State of Jalisco, Mexico. F. E. Lutz.

359. Peromyscus rufinus (Merriam).

Hesperomys leucopus rufinus Merr., N. Am. Faun., No. 3, 1890, p. 65, pl. 3.

Peromyscus rufinus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 126. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 142. Zoöl. Ser.

TAWNY FIELD MOUSE.

1. Adult ♂ Exch. Florida, La Plata County, Colorado. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
2. Adult ♀ Exch. Florida, La Plata County, Colorado. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
3–4. Adult ♂ Exch. Aztec, New Mexico. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
5. Adult ♂ Exch. La Plata, New Mexico. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
6–7. Adult ♂ Exch. Riverview, Utah. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
8. Juv. ♂ Exch. Riverview, Utah. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
9. Adult ♀ Exch. Riverview, Utah. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
10. Juv. ♀ Exch. Riverview, Utah. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
11. Adult ♂ Exch. Lawrence, Kansas. Am. Mus. Nat. Hist. N. Y. L. L. Dyche.
12–13. Adult ♂ Coll. Grand Junction, Colorado. Riggs & Menke.
14. Adult ♀ Coll. Grand Junction, Colorado. Riggs & Menke.
15–49. Adult ♂ P. Chiricahua Mountains, Arizona. W. W. Price.
50–66. Adult ♀ P. Chiricahua Mountains, Arizona. W. W. Price.
67. Juv. ♂ P. Chiricahua Mountains, Arizona. W. W. Price.
68. Juv. ♀ P. Chiricahua Mountains, Arizona. W. W. Price.
69–77. Adult ♂ P. Graham Mountains, Arizona. W. W. Price.

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78–81. Adult ♀ P. Graham Mountains, Arizona. W. W. Price.
82–106. Adult ♂ P. White Mountains, Arizona. W. W. Price.
107–115. Adult ♀ P. White Mountains, Arizona. W. W. Price.
116–117. Adult — P. White Mountains, Arizona. W. W. Price.

360. Peromyscus *gossympinus (Le Conte).

Hesperomys gossypinus! (misprint) Le Conte, Proc. Acad. Nat. Scien. Phil., 1853, p. 411.

Peromyscus gossypinus! Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 126. Zoöl. Ser.

Peromyscus gossympinus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 143. Zoöl. Ser.

COTTON TREE MOUSE.

1–6. Adult ♂ Exch. Gainesville, Florida. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
7–15. Adult ♀ Exch. Gainesville, Florida. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
16–17. Adult ♂ Coll. New Berlin, Florida. T. Surber.
18. Adult — Coll. New Berlin, Florida. T. Surber.
19. Adult ♀ Coll. St. Charles Creek, Florida. T. Surber.
20–23. Adult ♂ Coll. Riceboro, Georgia. T. Surber.
24–25. Adult ♀ Coll. Riceboro, Georgia. T. Surber.
26. Juv. ♂ Coll. Riceboro, Georgia. T. Surber.
27. Adult ♀ Exch. Enterprise, Florida. Am. Mus. Nat. Hist. N. Y. C. L. Brownell.

a. Peromyscus gossympinus palmarius Bangs.

Peromyscus gossypinus! palmarius Bangs, Proc. Biol. Soc. Wash., X, 1896, p. 124. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 127. Zoöl. Ser.

Peromyscus gossympinus palmarius Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 143. Zoöl. Ser.

FLORIDA FIELD MOUSE.

1–2. Adult ♂ Coll. Micco, Florida. T. Surber.
3. Juv. ♂ Coll. Micco, Florida. T. Surber.
4–5. Adult ♀ Coll. Micco, Florida. T. Surber.
6–7. Adult ♂ Coll. E. Penin., opp. Micco, Florida. T. Surber.
8–9. Adult ♀ Coll. E. Penin., opp. Micco, Florida. T. Surber.
10–11. Adult ♂ Topotypes. Coll. Oak Lodge, Florida. T. Surber.
12–13. Adult ♂ Coll. Tarpon Springs, Florida. T. Surber.
14–15. Adult ♀ Coll. Tarpon Springs, Florida. T. Surber.

**Gossympinus*, the cotton tree, also *gossypion*, nec *gossypinus!*

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16–20. Adult ♂ Coll. Crystal River, Florida. T. Surber.
21–25. Adult ♀ Coll. Crystal River, Florida. T. Surber.
26–32. Adult ♂ Coll. Enterprise, Florida. T. Surber.
33–34. Juv. ♂ Coll. Enterprise, Florida. T. Surber.
35–38. Adult ♀ Coll. Enterprise, Florida. T. Surber.

361. Peromyscus anastasiæ Bangs.

Peromyscus anastasæ! Bangs, Proc. Bost. Soc. Nat. Hist., XXVIII, 1898, p. 195.

Peromyscus anastasiæ Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 128. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 143. Zoöl. Ser.

ANASTASIA ISLAND MOUSE.

1–5. Adult ♂ Coll. Anastasia Island, Florida. T. Surber.
6–8. Adult ♀ Coll. Anastasia Island, Florida. T. Surber.
9. Juv. ♀ Coll. Anastasia Island, Florida. T. Surber.

362. Peromyscus canadensis (Miller).

Hesperomys gracilis Le Conte, Proc. Acad. Nat. Scien. Phil., 1855, p. 442. (Indeterminable.)

Hesperomys myoides Baird, N. Am. Mamm., 1857, p. 472. (nec Gapper.)

Sitomys americanus canadensis Miller, Proc. Biol. Soc. Wash., VIII, 1893, p. 55.

Peromyscus canadensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 128. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 144. Zoöl. Ser.

CANADIAN FIELD MOUSE.

1–6. Adult ♂ Coll. Murray Bay, Quebec, Canada. T. Surber.
7–10. Adult ♀ Coll. Murray Bay, Quebec, Canada. T. Surber.
11. Juv. ♂ Coll. Murray Bay, Quebec, Canada. T. Surber.
12. Juv. ♀ Coll. Murray Bay, Quebec, Canada. T. Surber.
13–17. Adult ♂ Coll. Rivière du Loup, Quebec Canada. T. Surber.
18–19. Adult ♀ Coll. Rivière du Loup, Quebec, Canada. T. Surber.
20. Juv. ♂ Coll. Salmon Lake, Quebec, Canada. T. Surber.
21. Adult ♂ Exch. Tobique River, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
22. Adult ♀ Exch. Tobique River, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
23. Juv. ♂ Exch. Tobique River, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

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24. Adult ♂ Exch. Trousers Lake, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
25–26. Adult ♀ Exch. Trousers Lake, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
27. Adult — Exch. Forks of the Tobique River, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
28–29. Adult ♀ Exch. South Twin Lake, Maine. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
30. Adult ♂ Coll. Trout Creek, Ontario, Canada. L. Kenkel.
31. Adult ♀ Coll. Trout Creek, Ontario, Canada. L. Kenkel.
32–33. Adult ♀ Coll. Gravenhurst, Ontario, Canada. L. Kenkel.

363. Peromyscus texensis (Woodhouse).

Hesperomys texana! Woodhouse, Proc. Acad. Nat. Scien. Phil., 1853, p. 242.

Peromyscus texensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 130. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 186. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 145. Zoöl. Ser.

TEXAS FIELD MOUSE.

1. Adult ♂ *Type of description. Exch. Tejon Creek, Indian Territory. Am. Mus. Nat. Hist. N. Y. Richardson.

a. Peromyscus texensis gambeli (Baird).

Hesperomys gambelii Baird, N. Am. Mamm., 1857, p. 464.

Peromyscus texensis gambeli Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 130. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 145. Zoöl. Ser.

GAMBEL'S MOUSE.

1–53. Adult ♂ P. Silver Lake, Amador County, California. W. W. Price.
54–114. Adult ♀ P. Silver Lake, Amador County, California. W. W. Price.
115–117. Adult ♂ P. Blue Lake, Alpine County, California. W. W. Price.
118. Adult ♀ P. Blue Lake, Alpine County, California. W. W. Price.
119–131. Adult ♂ P. Pyramid Peak, Eldorado County, California. W. W. Price.
132–151. Adult ♀ P. Pyramid Peak, Eldorado County, California. W. W. Price.

*Type of this species was preserved in spirits, and the colors could not be given.

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152–161. Adult ♂ P. Big Trees, Calaveras County, California. W. W. Price.

162. Adult ♀ P. Big Trees, Calaveras County, California. W. W. Price.

163–171. Adult ♂ P. Hermit Valley, Calaveras County, California. W. W. Price.

172–175. Adult ♀ P. Hermit Valley, Calaveras County, California. W. W. Price.

176–186. Adult ♂ P. Alum Rock Park, Santa Clara County, California. W. W. Price.

187–194. Adult ♀ P. Alum Rock Park, Santa Clara County, California. W. W. Price.

195–196. Adult ♂ P. Mt. Hamilton, California. W. W. Price.

197. Adult ♂ P. Echo, Eldorado County, California. W. W. Price.

198. Adult ♀ P. Bloods, Calaveras County, California. W. W. Price.

199–212. Adult ♂ P. Snow Mountains, Colusa County, California. W. W. Price.

213–223. Adult ♀ P. Snow Mountains, Colusa County, California. W. W. Price.

224–225. Adult ♂ P. La Honda, San Mateo County, California. W. W. Price.

226. Adult ♀ P. La Honda, San Mateo County, California. W. W. Price.

227. Adult ♂ P. Edgewood, Douglas County, Nevada. W. W. Price.

228–233. Adult ♂ Coll. Nicasio, California. E. Heller.

234–235. Adult ♀ Coll. Nicasio, California. E. Heller.

236–238. Adult ♂ Coll. Petaluma, California. E. Heller.

239. Adult ♀ Coll. Petaluma, California. E. Heller.

240–251. Adult ♂ P. Los Angeles, California. J. Rowley.

252–253. Adult ♀ P. Los Angeles, California. J. Rowley.

254–255. Adult ♂ P. Stanford University, Palo Alto, California. M. P. Anderson.

256–257. Adult ♀ P. Stanford University, Palo Alto, California. M. P. Anderson.

258–338. Adult ♂ P. Portola, San Mateo County, California. W. W. Price.

339–414. Adult ♀ P. Portola, San Mateo County, California. W. W. Price.

415–417. Adult — P. Portola, San Mateo County, California. W. W. Price.

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b. Peromyscus texensis nebrascensis (Mearns).

Hesperomys leucopus nebrascensis Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 287.

Peromyscus texensis nebrascensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 130. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 146. Zoöl. Ser.

NEBRASKA FIELD MOUSE.

1–2. Adult ♂ Exch. Coral Draw, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

3. Adult ♀ Exch. Coral Draw, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

4–5. Adult ♂ Exch. Spring Creek, Custer County, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

6. Adult ♂ Exch. Cheyenne River, Custer County, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

7–8. Adult ♀ Exch. Perch, Rock County, Nebraska. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

9. Adult ♀ Exch. Long Island, Phillips County, Kansas. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

10–13. Adult ♂ Exch. Bitter Creek, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

14. Adult ♀ Exch. Bitter Creek, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

c. Peromyscus texensis arcticus (Mearns).

Hesperomys leucopus arcticus Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 285.

Peromyscus texensis arcticus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 131. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 146. Zoöl. Ser.

ARCTIC FIELD MOUSE.

1–2. Juv. ♂ P. Kensington, Prince Edward Island, Canada. R. T. Young.

3. Adult ♂ P. Cariboo, British Columbia, Canada. C. K. Worthern.

d. Peromyscus texensis subarcticus Allen.

Peromyscus texanus subarcticus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1899, p. 15.

Peromyscus texensis subarcticus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 131. Zoöl. Ser. *Id.* Check-L. Mamm.

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N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 146. Zoöl. Ser.

SUBARCTIC FIELD MOUSE.

1–3. Adult ♂ Exch. Squaw Creek, Custer County, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

4. Adult ♀ Exch. Squaw Creek, Custer County, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

5–6. Adult ♂ Exch. Otto, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

7. Adult ♂ Exch. Sherman, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

8. Adult ♀ Exch. Sherman, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

9. Adult ♂ P. Yellowstone National Park. E. Thompson Seton.

10–11. Adult ♀ P. Yellowstone National Park. E. Thompson Seton.

12–36. Adult ♂ P. Boulder, Colorado. R. T. Young.

37–57. Adult ♀ P. Boulder, Colorado. R. T. Young.

58–62. Adult ♂ P. Nederland, Colorado. R. T. Young.

63–68. Adult ♀ P. Nederland, Colorado. R. T. Young.

69–73. Adult ♂ P. Canadian Nat. Park, Alberta, Canada. G. F. Dippie.

74–76. Juv. ♂ P. Canadian Nat. Park, Alberta, Canada. G. F. Dippie.

77–78. Adult ♀ P. Canadian Nat. Park, Alberta, Canada. G. F. Dippie.

79–85. Adult ♂ P. Red Deer, Alberta, Canada. G. F. Dippie.

86–93. Adult ♀ P. Red Deer, Alberta, Canada. G. F. Dippie.

94. Adult ♂ P. Okanagon Lake, British Columbia, Canada. G. F. Dippie.

95. Adult ♀ P. Okanagon Lake, British Columbia, Canada. G. F. Dippie.

96. Adult ♂ P. Okanagon Lake, British Columbia, Canada. A. C. Brooks.

97. Adult ♀ P. Okanagon Lake, British Columbia, Canada. A. C. Brooks.

e. Peromyscus texensis thurberi (Allen).

Sitomys americanus thurberi Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 185.

Peromyscus texanus medius Mearns, Proc. U. S. Nat. Mus., 1896, p. 446.

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Peromyscus texensis medius Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 130. Zoöl. Ser.

Peromyscus thurberi Elliot, Pub. Field Columb. Mus., III, 1903, p. 212. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 176. Zoöl. Ser.

Peromyscus texensis thurberi Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 146. Zoöl. Ser.

THURBER'S FIELD MOUSE.

1. Adult ♀ Exch. Guadalupe Valley, Lower California, Mexico. Am. Mus. Nat. Hist. N. Y. A. W. Anthony.
2. Adult ♂ Paratype. Exch. San Pedro Martir Mts., Lower California, Mexico. Am. Mus. Nat. Hist. N. Y. E. C. Thurber.
3. Adult ♀ Paratype. Exch. San Pedro Martir Mts., Lower California, Mexico. Am. Mus. Nat. Hist. N. Y. E. C. Thurber.
4. Adult ♂ Exch. Eucinita, San Pedro Martir Mts., Lower California, Mexico. Am. Mus. Nat. Hist. N. Y. E. C. Thurber.
5. Adult ♀ Exch. Ysadora, San Pedro Martir Mts., Lower California, Mexico. Am. Mus. Nat. Hist. N. Y. E. C. Thurber.

6–13. Adult ♂ Coll. Ensenada, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

14–18. Adult ♀ Coll. Ensenada, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

19–21. Adult ♂ Coll. Trinidad, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

22–23. Adult ♀ Coll. Aguaje de las Fresas, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

24. Adult ♂ Coll. El Alamo, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
25. Adult ♀ Coll. El Alamo, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
26. Adult ♂ Coll. San Matias Spring, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
27. Adult ♀ Coll. Las Eucinas, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

28–29. Adult ♂ Coll. Juncolito Spring, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

30. Adult ♂ Coll. Head of San Antonio River, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

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31–34. Adult ♀ Coll. Head of San Antonio River, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
35–37. Adult ♂ Coll. Santa Rosa, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
38. Adult ♀ Coll. Santa Rosa, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
39. Adult ♂ Coll. Vallecitos, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
40–43. Adult ♂ Coll. La Grulla, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
44–45. Adult ♀ Coll. La Grulla, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
46–55. Adult ♂ Coll. Santa Eulalia, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
56–59. Adult ♀ Coll. Santa Eulalia, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
60–63. Adult ♂ Coll. Rosarito, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
64–65. Adult ♀ Coll. Rosarito, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
66. Adult ♂ Coll. Salado River Cañon, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
67. Adult ♂ Coll. San Felipe, Lower California, Mexico. E. Heller.
68. Adult ♀ Coll. San Felipe, Lower California, Mexico. E. Heller.
69–77. Adult ♂ Coll. San Quentin, Lower California, Mexico. E. Heller.
78–79. Adult ♀ Coll. San Quentin, Lower California, Mexico. E. Heller.
80–82. Adult ♂ P. San Antonio, California. W. W. Price.
83. Juv. ♂ P. San Antonio, California. W. W. Price.
84–86. Adult ♀ P. San Antonio, California. W. W. Price.
87. Adult ♂ P. Jamul, California. E. Heller.
88. Adult ♀ P. Cuyamaco, California. E. Heller.
89. Adult ♂ P. San Juan, California. E. Heller.
90. Adult ♀ P. San Juan, California. E. Heller.

364. Peromyscus akeleyi Elliot.

Peromyscus akeleyi Elliot, Pub. Field Columb. Mus., I, 1899, p. 226. Zoöl. Ser. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 129. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 148. Zoöl. Ser.

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AKELEY'S FIELD MOUSE.

1–34. Adult ♂ Type and paratypes. Coll. Johnson's Ranch, Elwah River, Olympic Mts., Clallam County, Washington. D. G. Elliot.

35–42. Juv. ♀ Paratypes. Coll. Johnson's Ranch, Elwah River, Olympic Mts., Clallam County, Washington. D. G. Elliot.

43–47. Adult ♀ Paratypes. Coll. Johnson's Ranch, Elwah River, Olympic Mts., Clallam County, Washington. D. G. Elliot.

48–69. Adult ♂ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

70. Juv. ♂ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

71. Juv. ♀ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

72–90. Adult ♀ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

91–113. Adult ♂ Coll. Boulder Creek, Olympic Mts., Clallam County, Washington. D. G. Elliot.

114–136. Adult ♀ Coll. Boulder Creek, Olympic Mts., Clallam County, Washington. D. G. Elliot.

137–146. Adult ♂ Coll. Boulder Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

147–148. Adult ♀ Coll. Boulder Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

365. Peromyscus homochroia Elliot.

Peromyscus homochroia Elliot, Pub. Field Columb. Mus., III, 1903, p. 158. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 200. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 148. Zoöl. Ser.

SAN QUENTIN MOUSE.

1–8. Adult ♂ Type and paratypes. Coll. San Quentin, Lower California, Mexico. E. Heller.

9–14. Adult ♀ Paratypes. Coll. San Quentin, Lower California, Mexico. E. Heller.

15. Adult ♂ Coll. Head of San Antonio River, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

366. Peromyscus gaurus Elliot.

Peromyscus gaurus Elliot, Pub. Field Columb. Mus., III, 1903, p.

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157. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 199. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 148. Zoöl. Ser.

FRISKY MOUSE.

1–3. Adult ♂ Paratypes. Coll. San Antonio, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

4–6. Adult ♀ Type and paratypes. Coll. San Antonio, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

367. Peromyscus catalinæ Elliot.

Peromyscus catalinæ Elliot, Pub. Field Columb. Mus., III, 1903, p. 160. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 149. Zoöl. Ser.

CATALINA ISLAND MOUSE.

1–7. Adult ♂ Type and paratypes. P. Santa Catalina Island, California. J. Rowley.

8–10. Adult ♀ Paratypes. P. Santa Catalina Island, California. J. Rowley.

11–12. Juv. ♂ Paratypes. P. Santa Catalina Island, California. J. Rowley.

13. Juv. ♀ Paratype. P. Santa Catalina Island, California. J. Rowley.

368. Peromyscus austerus (Baird).

Hesperomys austerus Baird, Proc. Acad. Nat. Scien. Phil., 1855, p. 336.

Peromyscus austerus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 132. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 149. Zoöl. Ser.

TROUBLESOME FIELD MOUSE.

1–4. Adult ♂ Coll. Grant's Pass, Oregon. E. Heller.

5. Adult ♀ Coll. Grant's Pass, Oregon. E. Heller.

6–9. Adult ♂ Coll. Scottsburg, Oregon. E. Heller.

10. Adult ♀ Coll. Scottsburg, Oregon. E. Heller.

11–24. Adult ♂ Coll. Gardiner, Oregon. E. Heller.

25–29. Adult ♀ Coll. Gardiner, Oregon. E. Heller.

30–34. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.

35–41. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.

42–44. Adult ♂ Coll. Florence, Oregon. E. Heller.

45–46. Adult ♀ Coll. Florence, Oregon. E. Heller.

47–48. Adult ♀ Coll. Marshfield, Oregon. E. Heller.

49. Adult ♂ Coll. Marshfield, Oregon. E. Heller.

50. Adult ♂ Coll. Agness, Oregon. E. Heller.

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51–52. Adult ♂ Coll. McCoy, Oregon. E. Heller.
53–57. Adult ♂ Exch. Campus of the University, Seattle, Washington. Univer. Washington. E. C. Starks.
58–61. Adult ♀ Exch. Campus of the University, Seattle, Washington. Univer. Washington. E. C. Starks.

369. Peromyscus perimecurus Elliot.

Peromyscus perimecurus Elliot, Pub. Field Columb. Mus., III, 1903, p. 156. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 149. Zoöl. Ser.

LONG-TAILED MOUSE.

1–4. Adult ♀ Type and paratypes. Coll. Goldbeach, Oregon. E. Heller.
5. Adult ♂ Coll. Florence, Oregon. E. Heller.
6. Adult ♂ Coll. Gardiner, Oregon. E. Heller.
7. Adult ♀ Coll. Agness, Oregon. E. Heller.

370. Peromyscus mearnsi (Allen).

Vesperimus mearnsii Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 300.

Peromyscus mearnsi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 132. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 150. Zoöl. Ser.

MEARNS'S FIELD MOUSE.

1. Adult ♂ Exch. Brownsville, Texas. Am. Mus. Nat. Hist. N. Y. F. B. Armstrong.
2. Adult ♀ Exch. Brownsville, Texas. Am. Mus. Nat. Hist. N. Y. F. B. Armstrong.
3. Adult ♂ Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
4–5. Adult ♀ Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
6. Juv. ♀ Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

371. Peromyscus canus Mearns.

Peromyscus canus Mearns, Proc. U. S. Nat. Mus., 1896, p. 445. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 132. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 150. Zoöl. Ser.

HOARY FIELD MOUSE.

1–8. Adult ♂ Coll. White Horse Springs, Oklahoma Territory. T. Surber.
9–16. Adult ♀ Coll. White Horse Springs, Oklahoma Territory. T. Surber.

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17–23. Adult ♂ Coll. Alva, Oklahoma Territory. T. Surber.
24–25. Adult ♀ Coll. Alva, Oklahoma Territory. T. Surber.
26. Juv. ♂ Coll. Alva, Oklahoma Territory. T. Surber.
27. Juv. ♀ Coll. Alva, Oklahoma Territory. T. Surber.
28–38. Adult ♂ Coll. Noble, Oklahoma Territory. T. Surber.
39–48. Adult ♀ Coll. Noble, Oklahoma Territory. T. Surber.
49–51. Adult ♂ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
52. Adult ♀ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
53. Adult ♂ Exch. Fort Clarke, Texas. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
54. Adult ♀ Exch. Fort Clarke, Texas. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
55. Juv. ♀ Exch. Fort Clarke, Texas. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

372. Peromyscus boylii (Baird).

Hesperomys boylii Baird, Proc. Acad. Nat. Scien. Phil., 1855, p. 335.
Sitomys gilberti Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 188.
Peromyscus boylii Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 132. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 195. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 150. Zoöl. Ser.

BOYLE'S FIELD MOUSE.

1–12. Adult ♂ P. Alum Rock Park, Santa Clara County, California. W. W. Price.
13–15. Adult ♀ P. Alum Rock Park, Santa Clara County, California. W. W. Price.
16–19. Juv. ♂ P. Alum Rock Park, Santa Clara County, California. W. W. Price.
20–22. Juv. ♀ P. Alum Rock Park, Santa Clara County, California. W. W. Price.
23–39. Adult ♂ P. Snow Mountains, Colusa County, California. W. W. Price.
40–54. Adult ♀ P. Snow Mountains, Colusa County, California. W. W. Price.
55–62. Adult ♂ P. Mt. Hamilton, Santa Clara County, California. W. W. Price.
63–75. Adult ♀ P. Mt. Hamilton, Santa Clara County, California. W. W. Price.

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76–98. Adult ♂ P. Mt. Hamilton, Monterey County, California. W. W. Price.
99–111. Adult ♀ P. Mt. Hamilton, Monterey County, California. W. W. Price.
112–126. Adult ♂ P. San Antonio, San Bernardino County, California. W. W. Price.
127–144. Adult ♀ P. San Antonio, San Bernardino County, California. W. W. Price.

373. Peromyscus rowleyi (Allen).

Sitomys rowleyi Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 76.

Peromyscus rowleyi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 134. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 151. Zoöl. Ser.

ROWLEY'S FIELD MOUSE.

1. Adult ♂ Paratype. Exch. Nolan's Ranch, San Juan River, Utah. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
2. Adult ♂ Exch. Bluff City, Utah. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
3. Adult ♂ Exch. Bradshaw City, Arizona. Am. Mus. Nat. Hist. N. Y. H. H. Keays.
4. Adult ♂ Exch. Pinal County, Arizona. Am. Mus. Nat. Hist. N. Y. W. E. D. Scott.
5. Adult ♀ Exch. Pinal County, Arizona. Am. Mus. Nat. Hist. N. Y. W. E. D. Scott.

a. Peromyscus rowleyi pinalis (Miller).

Sitomys rowleyi pinalis Miller, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 331.

Peromyscus rowleyi pinalis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 135. Zoöl. Ser. *Id.* Mamm. Middle Ame . &. W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 189. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 151. Zoöl. Ser.

ROWLEY'S PINE MOUSE.

1–18. Adult ♂ P. Huachuca Mts., Arizona. W. W. Price.
19–27. Adult ♀ P. Huachuca Mts., Arizona. W. W. Price.
28–29. Adult — P. Huachuca Mts., Arizona. W. W. Price.
30–47. Adult ♂ P. Chiricahua Mts., Arizona. W. W. Price.
48–59. Adult ♀ P. Chiricahua Mts., Arizona. W. W. Price.
60. Adult ♀ P. White Mts., Arizona. W. W. Price.
61. Adult ♂ P. Huaravas Mts., State of Sonora, Mexico. W. W. Price.

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62–64. Adult ♀ P. Huaravas Mts., State of Sonora, Mexico. W. W. Price.
65. Adult ♂ P. Oposura Mts., State of Sonora, Mexico. W. W. Price.
66–67. Adult ♀ P. Oposura Mts., State of Sonora, Mexico. W. W. Price.

374. Peromyscus parasiticus Elliot.

Peromyscus parasiticus Elliot, Pub. Field Columb. Mus., III, 1903, p. 244. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 151. Zoöl. Ser.

PARASITE MOUSE.

1–4. Adult ♂ Type and paratypes. Coll. Lone Pine, Inyo County, California. E. Heller.
5–6. Adult ♀ Paratypes. Coll. Lone Pine, Inyo County, California. E. Heller.

a. Peromyscus oreas rubidus Osgood.

Peromyscus oreas rubidus Osgood, Proc. Biol. Soc. Wash., XIV, 1901, p. 193. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 153. Zoöl. Ser.

REDDISH MOUSE.

1–6. Adult ♂ Topotypes. Coll. Mendocino, California. E. Heller.
7–8. Adult ♀ Topotypes. Coll. Mendocino, California. E. Heller.
9. Adult ♂ Coll. Point Reyes, California. E. Heller.
10. Adult ♀ Coll. Point Reyes, California. E. Heller.
11–15. Adult ♂ Coll. Eureka, California. E. Heller.
16–20. Adult ♀ Coll. Eureka, California. E. Heller.
21–26. Adult ♂ Coll. Crescent City, California. E. Heller.
27. Adult ♀ Coll. Crescent City, California. E. Heller.
28–38. Adult ♂ Coll. Requa, California. E. Heller.
39–46. Adult ♀ Coll. Requa, California. E. Heller.

375. Peromyscus auripectus (Allen).

Sitomys auripectus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 75.

Peromyscus auripectus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 134. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 153. Zoöl. Ser.

GOLDEN BREASTED MOUSE.

1–3. Adult ♂ P. Holbrook, Arizona. W. W. Price.
4–7. Adult ♀ P. Holbrook, Arizona. W. W. Price.

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Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 155. Zoöl. Ser.

RELATED WHITE-FOOTED MOUSE.

1–2. Adult ♂ P. Jamul Ranch, San Diego County, California. F. Stephens.

3–4. Adult ♀ P. Jamul Ranch, San Diego County, California. F. Stephens.

5. Adult ♂ Topotype. P. Dulzura, San Diego County, California. F. Stephens.

6. Adult ♂ P. San Diego, California. F. Stephens.

7. Adult ♀ P. Aguanga, Riverside County, California. F. Stephens.

8–11. Adult ♂ Coll. Ensenada, Lower California, Mexico. E. Heller.

12. Adult ♀ Coll. Ensenada, Lower California, Mexico. E. Heller.

13–17. Adult ♂ Coll. Trinidad, Lower California, Mexico. E. Heller.

18–19. Adult ♀ Coll. Trinidad, Lower California, Mexico. E. Heller.

20. Adult ♂ Coll. Las Eucinas, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

21. Adult ♀ Coll. Las Eucinas, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

22. Adult ♀ Coll. Salado River Cañon, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

23–25. Adult ♂ Coll. San Antonio, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

26–29. Adult ♀ Coll. San Antonio, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

30. Adult ♂ Coll. Rosarito, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

31–32. Adult ♀ Coll. Rosarito, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

33–36. Adult ♂ Coll. San Quentin, Lower California, Mexico. E. Heller.

37–39. Adult ♂ Coll. Head of San Antonio River, Lower California, Mexico. E. Heller.

40–42. Adult ♀ Coll. Head of San Antonio River, Lower California, Mexico. E. Heller.

379. Peromyscus major (Rhoads).

Sitomys major Rhoads, Amer. Nat., XXVII, 1893, p. 831.

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Peromyscus major Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 137. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 155. Zoöl. Ser.

SQUIRREL INN MOUSE.

1–2. Adult ♂ P. Cuyamaco, San Diego County, California. E. Heller.

3–4. Juv. ♀ P. Cuyamaco, San Diego County, California. E. Heller.

5–6. Adult ♂ P. Dulzura, San Diego County, California. E. Heller.

7. Adult ♂ P. Oak Grove, San Diego County, California. E. Heller.

8. Adult ♀ P. Julian, San Diego County, California. E. Heller.

9–10. Adult ♀ P. Squirrel Inn, San Bernardino Mts., California. E. Heller.

11–12. Adult ♀ Exch. Santa Ysabel, California. Am. Mus. Nat. Hist. N. Y. F. Stephens.

380. Peromyscus herroni (Rhoads).

Sitomys herronii Rhoads, Amer. Nat., XXVII, 1893, p. 832.

Peromyscus herroni Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 137. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 155. Zoöl. Ser.

HERRON'S FIELD MOUSE.

1–3. Adult ♂ P. Aguanga, Riverside County, California. F. Stephens.

4. Adult ♀ P. Aguanga, Riverside County, California. F. Stephens.

381. Peromyscus insignis Rhoads.

Peromyscus insignis Rhoads, Proc. Acad. Nat. Scien. Phil., 1895, p. 33. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 138. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 203. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 155. Zoöl. Ser.

SACHEM, OR CHIEF MOUSE.

1. Adult ♀ P. Santa Ysabel, San Diego County, California. F. Stephens.

2–4. Adult ♂ Topotypes. P. Dulzura, San Diego County, California. F. Stephens.

5. Adult ♀ Topotype. P. Dulzura, San Diego County, California. F. Stephens.

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265. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 157. Zoöl. Ser.

WOOLLY MOUSE.

1–13. Adult ♂ Paratypes. Coll. Hannopee Cañon, Panamint Mts., California. E. Heller.

14–15. Adult ♀ Type and paratypes. Coll. Hannopee Cañon, Panamint Mts., California. E. Heller.

16–17. Adult ♂ Coll. Coal Kilns, Panamint Mts., California. E. Heller.

18. Adult ♀ Coll. Coal Kilns, Panamint Mts., California. E. Heller.

19–23. Adult ♂ Coll. Inyo Mts., summits E. of Lone Pine, California. E. Heller.

24–29. Adult ♀ Coll. Inyo Mts., summits E. of Lone Pine, California. E. Heller.

387. Peromyscus difficilis (Allen).

Vesperimus difficilis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 298.

Peromyscus difficilis Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 193. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 158. Zoöl. Ser.

TROUBLESOME MOUSE.

1–14. Adult ♂ Coll. Esperanza, State of Puebla, Mexico. Heller & Barber.

15–20. Adult ♀ Coll. Esperanza, State of Puebla, Mexico. Heller & Barber.

21. Adult ♂ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

22. Adult ♀ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

388. Peromyscus sagax Elliot.

Peromyscus sagax Elliot, Pub. Field Columb. Mus., III, 1903, p. 142. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 194. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 158. Zoöl. Ser.

LA PALMA FIELD MOUSE.

1. Adult ♂ Type. Coll. La Palma, State of Michoacan, Mexico. F. E. Lutz.

2–5. Adult ♂ Coll. Patzcuaro, State of Michoacan, Mexico. F. E. Lutz.

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389. Peromyscus truii (Shufeldt).

Hesperomys truei Shufeldt, Proc. U. S. Nat. Mus., 1886, p. 407, pl. XXI, figs. 1, 5, 8.

Peromyscus truii Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 139. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 159. Zoöl. Ser.

TRUE'S MOUSE.

1–7. Adult ♂ P. Anderson's Ranch, Douglas County, Nevada. W. W. Price.

8–16. Adult ♀ P. Anderson's Ranch, Douglas County, Nevada. W. W. Price.

17. Adult ♂ P. Mount Siegel, Douglas County, Nevada. W. W. Price.

a. Peromyscus truii nasutus (Allen).

Vesperimus nasutus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 299.

Peromyscus truii nasutus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 139. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 159. Zoöl. Ser.

LONG-NOSED MOUSE.

1–6. Adult ♂ P. Boulder, Colorado. R. T. Young

7–12. Adult ♀ P. Boulder, Colorado. R. T. Young.

390. Peromyscus martirensis (Allen).

Sitomys martirensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 187.

Peromyscus martirensis Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 189. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 159. Zoöl. Ser.

SAN PEDRO MARTIR MOUNTAINS MOUSE.

1–2. Adult ♀ Coll. San Matias Spring, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

3. Adult ♂ Coll. Piñon, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

4. Adult ♀ Coll. Piñon, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

5–8. Adult ♂ Coll. Aguaje de las Fresas, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

9–13. Adult ♀ Coll. Aguaje de las Fresas, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

14–16. Adult ♂ Coll. Vallecitos, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

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17–21. Adult ♀ Coll. Vallecitos, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
22–25. Adult ♂ Coll. La Grulla, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
26–28. Adult ♀ Coll. La Grulla, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
29–30. Adult ♂ Coll. Santa Rosa, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
31–35. Adult ♀ Coll. Santa Rosa, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
36–42. Adult ♂ Coll. Santa Eulalia, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
43–44. Adult ♀ Coll. Santa Eulalia, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
45–46. Adult ♂ Coll. Agua Escondido, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
47–48. Adult ♀ Coll. Agua Escondido, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
49–57. Adult ♂ Coll. Hanson Lagoon, Hanson Laguna Mts., Lower California, Mexico. E. Heller.
58–65. Adult ♀ Coll. Hanson Lagoon, Hanson Laguna Mts., Lower California, Mexico. E. Heller.
66–68. Adult ♂ Coll. Palomar, Hanson Laguna Mts., Lower California, Mexico. E. Heller.
69–71. Adult ♀ Coll. Palomar, Hanson Laguna Mts., Lower California, Mexico. E. Heller.
72. Adult ♀ Coll. Calaboza, Hanson Laguna Mts., Lower California, Mexico. E. Heller.

391. Peromyscus nuttalli (Harlan).

Arvicola nuttalli Harlan, Am. Month. Jour. Geol. & Nat. Scien. Phil., 1832, p. 446.

Mus (*Calomys*) *aureolus* Aud. & Bachm., Jour. Acad. Nat. Scien. Phil., 1842, p. 302.

Peromyscus nuttalli Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 140. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 160. Zoöl. Ser.

NUTTALL'S GOLDEN MOUSE.

1–2. Adult ♂ Exch. Weaverville, North Carolina. Am. Mus. Nat. Hist. N. Y. J. S. Cairns.
3–4. Adult ♀ Exch. Weaverville, North Carolina. Am. Mus. Nat. Hist. N. Y. J. S. Cairns.

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5. Adult ♀ Exch. Raleigh, North Carolina. Am. Mus. Nat. Hist. N. Y. H. H. & C. S. Brimley.
6–7. Adult ♂ Coll. Roanoke Rapids, North Carolina. T. Surber.
8–9. Adult ♀ Coll. Roanoke Rapids, North Carolina. T. Surber.
10–11. Juv. ♂ Coll. Roanoke Rapids, North Carolina. T. Surber.
12–18. Adult ♂ Coll. Apex, North Carolina. T. Surber.
19–20. Adult ♀ Coll. Apex, North Carolina. T. Surber.
21–28. Adult ♂ Coll. Calhoun Falls, South Carolina. T. Surber.
29. Juv. ♂ Coll. Calhoun Falls, South Carolina. T. Surber.
30–32. Adult ♀ Coll. Calhoun Falls, South Carolina. T. Surber.
33–35. Adult ♂ Coll. Catawba, South Carolina. T. Surber.

392. Peromyscus michiganensis (Audubon & Bachman).

Mus michiganensis Aud. & Bachm., Jour. Acad. Nat. Scien. Phil., 1842, p. 304.

Peromyscus michiganensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 140. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 160. Zoöl. Ser.

MICHIGAN FIELD MOUSE.

1. Adult ♂ Exch. Denver, Indiana. Am. Mus. Nat. Hist. N. Y. C. F. Fite.
2. Adult ♀ Exch. Denver, Indiana. Am. Mus. Nat. Hist. N. Y. C. F. Fite.
3. Adult ♀ P. Knoxville, Iowa. G. K. Cherrie.
4. Juv. ♂ Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
5. Adult ♀ Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
6–7. Adult ♂ Exch. Lawrence, Kansas. Am. Mus. Nat. Hist. N. Y. L. L. Dyche.
8. Adult ♀ Exch. Lawrence, Kansas. Am. Mus. Nat Hist. N. Y. L. L. Dyche.
9–13. Adult ♂ P. Lawrence, Kansas. J. Rowley.
14–16. Adult ♀ P. Lawrence, Kansas. J. Rowley.
17. Adult ♂ Coll. Jackson Park, Chicago, Illinois. L. Kenkel.
18. Adult ♀ Coll. Jackson Park, Chicago, Illinois. L. Kenkel.
19–23. Adult — Coll. Jackson Park, Chicago, Illinois. L. Kenkel.
24–25. Adult ♂ Coll. Minnewaukon, North Dakota. W. E. Snyder.
26. Adult ♀ Coll. Minnewaukon, North Dakota. W. E. Snyder.

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27–29. Adult ♂ Coll. Bottineau, North Dakota. W. E. Snyder.
30. Adult ♂ Coll. Jamestown, North Dakota. W. E. Snyder.
31. Adult ♂ Coll. Oakes, North Dakota. W. E. Snyder.
32. Adult ♀ Coll. Oakes, North Dakota. W. E. Snyder.
33. Adult ♂ P. Dickinson, North Dakota. G. K. Cherrie.
34–36. Adult ♀ P. Dickinson, North Dakota. G. K. Cherrie.
37. Adult ♂ Pres. Fox Lake, Illinois. C. E. Akeley.
38. Juv. ♂ Pres. Fox Lake, Illinois. C. E. Akeley.
39. Adult ♂ Pres. Beaver Dam, Wisconsin. W. E. Snyder.

a. Peromyscus michiganensis pallescens Allen.

Peromyscus michiganensis pallescens Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1896, p. 238. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 140. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 160. Zoöl. Ser.

PALE MICHIGAN MOUSE.

1–2. Adult ♂ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

393. Peromyscus melanotis Allen & Chapman.

Peromyscus melanotis Allen & Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 203. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 178. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 161. Zoöl. Ser.

BLACK-EARED FIELD MOUSE.

1–13. Adult ♂ Coll. Mt. Orizaba, State of Vera Cruz, Mexico. Heller & Barber.
14–22. Adult ♀ Coll. Mt. Orizaba, State of Vera Cruz, Mexico. Heller & Barber.

394. Peromyscus affinis (Allen).

Hesperomys affinis Allen, Proc. U. S. Nat. Mus., 1891, p. 195.

Peromyscus affinis Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 180. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 161. Zoöl. Ser.

ALLIED FIELD MOUSE.

1. Adult ♂ Coll. State of Vera Cruz, Mexico. N. G. Buxton.
2. Adult ♀ Coll. State of Vera Cruz, Mexico. N. G. Buxton.
3–9. Adult ♂ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.
10–13. Adult ♀ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.

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395. Peromyscus aztecus (Saussure).

Hesperomys aztecus Sauss., Rev. Mag. Zool., 2me Sér., XII, 1860, p. 105.

Peromyscus aztecus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 184. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 162. Zoöl. Ser.

AZTEC MOUSE.

1. Adult ♂ P. Mascota, State of Jalisco, Mexico. E. Gerrard & Sons. A. C. Buller.

396. Peromyscus levipes Merriam.

Peromyscus levipes Merr., Proc. Biol. Soc. Wash., XII, 1898, p. 123. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 195. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 164. Zoöl. Ser.

MOUNT MALINCHE MOUSE.

1–4. Adult ♂ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber.

5–8. Adult ♀ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber.

397. Peromyscus pavidus Elliot.

Peromyscus pavidus Elliot, Pub. Field Columb. Mus., III, 1903, p. 142. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 197. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 164. Zoöl. Ser.

SHY FIELD MOUSE.

1. Adult ♀ Type. Coll. Patzcuaro, State of Michoacan, Mexico. F. E. Lutz.

2–3. Adult ♂ Paratypes. Coll. Patzcuaro, State of Michoacan, Mexico. F. E. Lutz.

398. Peromyscus nudipes (Allen).

Hesperomys nudipes Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 213.

Peromyscus nudipes Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 198. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 165. Zoöl. Ser.

LA CARPINTERA FIELD MOUSE.

1–10. Adult ♂ P. Boquete, Chiriqui, Costa Rica. J. H. Batty.

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11–19. Adult ♀ P. Boquete, Chiriqui, Costa Rica. J. H. Batty.
20–25. Juv. ♂ P. Boquete, Chiriqui, Costa Rica. J. H. Batty.
26–28. Juv. ♀ P. Boquete, Chiriqui, Costa Rica. J. H. Batty.

399. Peromyscus mexicanus (Saussure).

Hesperomys mexicanus Sauss., Rev. Mag. Zool., 2me Sér., XII, 1860, p. 103, pl. IX, figs. 1, 1a.

Peromyscus mexicanus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 207. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 168. Zoöl. Ser.

MEXICAN MOUSE.

1–10. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
11–18. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
19. Adult ♀ Coll. Orizaba, State of Vera Cruz, Mexico. Heller & Barber.
20–22. Adult ♂ Coll. Lagunas, State of Oaxaca, Mexico. Heller & Barber.
23–27. Adult ♀ Coll. Lagunas, State of Oaxaca, Mexico. Heller & Barber.
28–36. Adult ♂ Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.
37–39. Adult ♀ Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.
40–45. Adult ♂ Coll. Xico, State of Vera Cruz, Mexico. N. G. Buxton.
46. Adult ♀ Coll. Xico, State of Vera Cruz, Mexico. N. G. Buxton.
47. Adult ♂ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber.

400. Peromyscus furvus Allen & Chapman.

Peromyscus furvus Allen & Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 201. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 208, fig. 33. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 169. Zoöl. Ser.

JALAPA FIELD MOUSE.

1. Adult ♀ Paratype. Exch. Jalapa, State of Vera Cruz, Mexico. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

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Genus 125. **Megadontomys.**

Megadontomys Merr., Proc. Biol. Soc. Wash., XII, 1898, p. 115. Type *Peromyscus thomasi* Merriam.

401. Megadontomys flavidus Bangs.

Megadontomys flavidus Bangs, Bull. Mus. Comp. Zoöl., XXXIX, 1902, p. 27. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 214. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 172. Zoöl. Ser.

BOQUETE FIELD MOUSE.

1–3. Adult ♂ P. Boquete, Chiriqui, Costa Rica. J. H. Batty.
4. Adult ♀ P. Boquete, Chiriqui, Costa Rica. J. H. Batty.

Genus 126. **Rhipidomys.**

Rhipidomys Tschudi, Archiv f. Naturgesch., I, 1844, p. 252. Type *Hesperomys leucodactylus* Tschudi.

402. Rhipidomys venezuelæ Thomas.

Rhipidomys venezuelæ Thos., Ann. Mag. Nat. Hist., XVIII, 1896, p. 303.

VENEZUELA FAN RAT.

1. Adult — P. Venezuela. Deyrolle Fils.

Genus 127. **Nectomys.**

Nectomys Peters, Abhand. K. Akad. Wiss. Berlin, 1861, p. 151, Taf. I, II, figs. 3–4. Type ——?

403. Nectomys palmipes Allen & Chapman.

Nectomys palmipes Allen & Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 209.

BROAD-FOOTED MOUSE.

1. Adult ♂ Exch. Caura, Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
2. Adult ♀ Paratype. Exch. Princestown, Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
3. Juv. ♂ Paratype. Exch. Princestown, Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

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4. Adult ♀ P. Savannah Grande, Trinidad. E. Gerrard & Sons. P. Rendall.

404. Nectomys squamipes (Lichtenstein).

Mus squamipes Licht., Brants's Muiz., 1827, p. 138. *Id.* Peters, Abh. Akad. Berl., 1860, p. 148, pl. II, fig. 1.

Mus brasiliensis Pictet, Mamm. Nouv. Mus. Genève, 1841, pl. 12–14. (nec E. Geoff.)

SWIMMING RAT.

1. Adult — P. South America! Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 128. **Sigmodon. Cotton Rats.**

Sigmodon Say & Ord, Jour. Acad. Nat. Scien. Phil., IV, 1825, p. 352, pl. XXII, figs. 5–8. Type *Sigmodon hispidus* Say & Ord.

405. Sigmodon hispidus Say & Ord.

Sigmodon hispidus Say & Ord, Jour. Acad. Nat. Scien. Phil., 1825, p. 354. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 144, fig. 31. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 174. Zoöl. Ser.

Arvicola ferrugineus Harl., Am. Jour. Scien., 1828, p. 285.

Arvicola hortensis Harl., Med. & Phys. Res., 1835, p. 49, pl. fig. 58.

HISPID COTTON RAT.

1–10. Adult ♂ Coll. Calhoun Falls, South Carolina. T. Surber.
11–15. Juv. ♂ Coll. Calhoun Falls, South Carolina. T. Surber.
16–26. Adult ♀ Coll. Calhoun Falls, South Carolina. T. Surber.
27–31. Juv. ♀ Coll. Calhoun Falls, South Carolina. T. Surber.
32–35. Adult ♂ Coll. Riceboro, Georgia. T. Surber.
36. Adult ♀ Coll. Riceboro, Georgia. T. Surber.
37. Adult ♂ Coll. St. Marys, Georgia. T. Surber.
38. Adult ♀ Coll. St. Marys, Georgia. T. Surber.
39–44. Adult ♂ Coll. Gainesville, Florida. T. Surber.
45. Adult ♀ Coll. Gainesville, Florida. T. Surber.
46. Adult ♀ Exch. Gainesville, Florida. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

a. Sigmodon hispidus littoralis Chapman.

Sigmodon hispidus littoralis Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1889, p. 118. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 144. Zoöl. Ser. *Id.* Check-L. Mamm. N.

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Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 175. Zoöl. Ser.

COAST COTTON RAT.

1–4. Adult ♂ Coll. Enterprise, Florida. T. Surber.
5–6. Adult ♀ Coll. Enterprise, Florida. T. Surber.
7. Juv. ♀ Coll. Enterprise, Florida. T. Surber.
8–10. Adult ♀ Exch. E. Penn., opposite Micco, Florida. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
11–12. Adult ♂ Coll. Tarpon Springs, Florida. T. Surber.
13–14. Adult ♂ Coll. Citronella, Florida. T. Surber.
15. Adult ♀ Coll. Citronella, Florida. T. Surber.
16. Adult ♂ Exch. Flamingo, Florida. Am. Mus. Nat. Hist. N. Y. C. L. Brownell.
17. Adult ♂ Coll. New Berlin, Florida. T. Surber.
18. Adult ♀ Coll. New Berlin, Florida. T. Surber.
19. Adult — Exch. Jupiter, Florida. Am. Mus. Nat. Hist. N. Y. C. L. Brownell.
20–21. Adult ♂ Coll. E. Penn., opp. Micco, Florida. T. Surber.
22–23. Adult ♂ Topotypes. Coll. Micco, Brevard Co., Florida. T. Surber.
24. Adult ♀ Topotype. Coll. Micco, Brevard Co., Florida. T. Surber.
25–28. Adult ♂ Coll. Espanita, Anastasia Island, Florida. T. Surber.
29–32. Adult ♀ Coll. Espanita, Anastasia Island, Florida. T. Surber.

b. Sigmodon hispidus texensis (Audubon & Bachman).

Arvicola texiana! Aud. & Bach., Quad. N. Am., III, 1853, p. 229.
Sigmodon hispidus texensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 114. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. & W. Indies, F. C. M. Pub., VI, 1905, p. 175. Zoöl. Ser.

TEXAN COTTON RAT.

1. Adult ♂ Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
2–3. Adult ♀ Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
4. Adult ♂ Exch. Corpus Christi, Texas. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
5. Adult ♂ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
6. Adult ♀ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

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7. Adult ♀ Exch. Cameron Co., Texas. Am. Mus. Nat. Hist. N. Y. C. K. Worthern.
8. Juv. ♂ Coll. Noble, Oklahoma Territory. T. Surber.
9–13. Juv. ♀ Coll. Noble, Oklahoma Territory. T. Surber.
14–17. Adult ♂ Coll. Dougherty, Oklahoma Territory. T. Surber.
18–20. Juv. ♀ Coll. Dougherty, Oklahoma Territory. T. Surber.

c. *Sigmodon hispidus arizonæ* Mearns.

Sigmodon hispidus arizonæ Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 287. Elliot, Syn. N. Amer. Mamm., F. C. M. Pub., II, 1901, p. 144. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 228. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 176. Zoöl. Ser.

ARIZONA COTTON RAT.

1–4. Adult ♂ P. Fairbank, Arizona. W. W. Price.
5–7. Adult ♀ P. Fairbank, Arizona. W. W. Price.

d. *Sigmodon hispidus mascotensis* (Allen).

Sigmodon mascotensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 54.

Sigmodon colimæ Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 55.

Sigmodon hispidus mascotensis Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 227. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 176. Zoöl. Ser.

MASCOTA COTTON RAT.

1. Adult — Coll. Ocotlan, State of Michoacan, Mexico. F. E. Lutz.
2. Adult ♂ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.
3. Adult ♀ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.
4. Adult ♂ Coll. Zanatepec, State of Oaxaca, Mexico. Heller & Barber.

e. *Sigmodon hispidus inexoratus* Elliot.

Sigmodon hispidus inexoratus Elliot, Pub. Field Columb. Mus., III, 1903, p. 144. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 229, fig. XXXVIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 177. Zoöl. Ser.

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OCOTLAN COTTON RAT.

1–11. Adult ♂ Type and paratypes. Coll. Ocotlan, State of Jalisco, Mexico. F. E. Lutz.

12–16. Adult ♀ Paratypes. Coll. Ocotlan, State of Jalisco, Mexico. F. E. Lutz.

f. Sigmodon hispidus toltecus (Saussure).

Hesperomys toltecus Sauss., Rev. Mag. Zool., 2me Sér., 1860, p. 98.

Sigmodon hispidus toltecus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 226. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 177. Zoöl. Ser.

TOLTEC COTTON RAT.

1–5. Adult ♂ Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.

6–8. Adult ♀ Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.

9–12. Adult ♂ Coll. Xico, State of Vera Cruz, Mexico. N. G. Buxton.

13–15. Adult ♀ Coll. Xico, State of Vera Cruz, Mexico. N. G. Buxton.

16. Juv. ♂ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

17. Juv. ♂ Coll. Mt. Orizaba, State of Vera Cruz, Mexico. Heller & Barber.

18–20. Adult ♂ Coll. Mt. Orizaba, State of Vera Cruz, Mexico. Heller & Barber.

21–22. Adult ♀ Coll. Mt. Orizaba, State of Vera Cruz, Mexico. Heller & Barber.

23–28. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

29–31. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

g. Sigmodon hispidus borucæ (Allen).

Sigmodon borucæ Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 40.

Sigmodon hispidus borucæ Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 224, fig. 38. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 178. Zoöl. Ser.

BORUCA COTTON RAT.

1–2. Adult ♀ Paratypes. Exch. Boruca, Costa Rica. Am. Mus. Nat. Hist. N. Y. G. K. Cherrie.

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3. Adult ♀ Exch. San José, Costa Rica. Am. Mus. Nat. Hist. N. Y. G. K. Cherrie.

h. Sigmodon hispidus chiriquensis (Allen).

Sigmodon borucæ chiriquensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1904, p. 68.

Sigmodon hispidus chiriquensis Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 225. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 178. Zoöl. Ser.

BOQUERON COTTON RAT.

1. Juv. — P. Boquete, Chiriqui, Costa Rica. J. H. Batty.

406. Sigmodon minimus Mearns.

Sigmodon minimus Mearns, Proc. U. S. Nat. Mus., XVII, 1894, p. 130. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 146. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 230. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 178. Zoöl. Ser.

LEAST COTTON RAT.

1. Adult ♂ P. S-B. Ranch, Arizona. W. W. Price.

407. Sigmodon leucotis Bailey.

Sigmodon leucotis Bailey, Proc. Biol. Soc. Wash., XV, 1902, p. 115. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 230. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 179. Zoöl. Ser.

WHITE-EARED COTTON RAT.

1–7. Adult ♂ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

408. Sigmodon sanctæmartæ Bangs.

Sigmodon sanctæmartæ Bangs, Proc. Biol. Soc. Wash., XII, 1898, p. 189.

SANTA MARTA COTTON RAT.

1–2. Adult ♂ P. Minca, Colombia. H. H. Smith.
3–5. Adult ♂ P. Mamatoca, Colombia. H. H. Smith.
6. Adult ♀ P. Mamatoca, Colombia. H. H. Smith.
7. Adult — P. Aqua Dulce, Colombia. H. H. Smith.
8–10. Adult ♂ P. Masinga, Colombia. H. H. Smith.

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Genus 129. **Oryzomys. Rice Rats.**

Oryzomys Baird, N. Am. Mamm., 1857, p. 458. Type *Mus palustris* Harlan.

Oligoryzomys Bangs, Proc. N. Eng. Zoöl. Club, I, 1900, p. 94, pl. I, fig. 2.

Subgenus A. Oryzomys.

409. Oryzomys palustris (Harlan).

Mus palustris Harl., Am. Jour. Scien. & Arts, XXXI, 1837, p. 385.

Hesperomys palustris Wagn., Schreb. Säugth., Suppl., III, 1843, p. 543.

Arvicola oryzivora Aud. & Bach., Quad. N. Am., III, 1853, p. 214, pl. CXLIV, fig. 3.

Oryzomys palustris texensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1894, p. 177. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 147. Zoöl. Ser.

Oryzomys palustris Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 147. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 180. Zoöl. Ser.

SWAMP RICE RAT.

1. Adult ♂ Exch. Raleigh, North Carolina. Am. Mus. Nat. Hist. N. Y. H. H. Brimley.
2–3. Adult ♀ Coll. Calhoun Falls, South Carolina. T. Surber.
4–8. Adult ♂ Coll. Riceboro, Georgia. T. Surber.
9. Adult ♀ Coll. Riceboro, Georgia. T. Surber.
10. Adult ♂ Coll. St. Marys, Georgia. T. Surber.
11. Adult ♀ Coll. St. Marys, Georgia. T. Surber.
12–15. Adult ♂ Coll. New Berlin, Florida. T. Surber.
16–19. Adult ♀ Coll. New Berlin, Florida. T. Surber.
20. Adult ♂ Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
21. Adult ♀ Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
22. Adult ♂ Pres. Okefenoke Swamp, Charlton Co., Georgia. B. T. Gault.

410. Oryzomys natator (Chapman).

Oryzomys palustris natator Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 44. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 147. Zoöl. Ser.

Oryzomys natator Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 181. Zoöl. Ser.

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SWIMMING RICE RAT.

1–2. Adult ♂ Paratypes. Exch. Gainesville, Florida. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

3–4. Adult ♀ Topotypes. Coll. Gainesville, Florida. T. Surber.

5–11. Adult ♂ Coll. Enterprise, Florida. T. Surber.

12. Juv. ♂ Coll. Enterprise, Florida. T. Surber.

13–15. Adult ♀ Coll. Enterprise, Florida. T. Surber.

16–18. Adult ♂ Coll. Micco, Florida. T. Surber.

19. Adult ♂ Exch. Flamingo, Florida. Am. Mus. Nat. Hist. N. Y. L. W. Brownell.

20–21. Adult ♂ Coll. Espanita, Anastasia Island, Florida. T. Surber.

22. Adult ♀ Coll. Espanita, Anastasia Island, Florida. T. Surber.

411. Oryzomys aquaticus Allen.

Oryzomys aquaticus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 289. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 147, fig. 32. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 181. Zoöl. Ser.

AQUATIC RICE RAT.

1. Adult ♂ Paratype. Exch. Brownsville, Texas. Am. Mus. Nat. Hist. N. Y. F. Armstrong.

2. Juv. ♀ Paratype. Exch. Brownsville, Texas. Am. Mus. Nat. Hist. N. Y. F. Armstrong.

412. Oryzomys albiventer Merriam.

Oryzomys albiventer Merr., Proc. Wash. Acad. Scien., III, 1901, p. 279. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 236. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 182. Zoöl. Ser.

WHITE-BELLIED RICE RAT.

1. Adult ♂ Coll. Puente de Ixtla, State of Morelos, Mexico. F. E. Lutz.

2–3. Adult ♀ Coll. Puente de Ixtla, State of Morelos, Mexico. F. E. Lutz.

4. Adult ♂ Coll. Balsas, State of Guerrero, Mexico. F. E. Lutz.

413. Oryzomys molestus Elliot.

Oryzomys molestus Elliot, Pub. Field Columb. Mus., III, 1903, p.

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145. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 240, fig. XXXIX. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 183. Zoöl. Ser.

OCOTLAN RICE RAT.

1. Adult ♂ Type. Coll. Ocotlan, State of Jalisco, Mexico. F. E. Lutz.

414. Oryzomys jalapæ Allen & Chapman.

Oryzomys jalapæ Allen & Chapm., Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 206. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 246. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 184. Zoöl. Ser.

JALAPA RICE RAT.

1. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
2. Adult ♀ Coll. Mt. Orizaba, State of Vera Cruz, Mexico. Heller & Barber.
3. Adult ♂ Coll. Mt. Orizaba, State of Vera Cruz, Mexico. Heller & Barber.

a. Oryzomys jalapæ apatelius Elliot.

Oryzomys jalapæ apatelius Elliot, Pub. Field Columb. Mus., III, 1904, p. 266. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 246. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 184. Zoöl. Ser.

DECEITFUL RICE RAT.

1–2. Adult ♂ Paratypes. Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.
3. Adult ♂ Coll. Xico, State of Vera Cruz, Mexico. N. G. Buxton.
4–6. Adult ♀ Type and paratypes. Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.

415. Oryzomys chapmani Thomas.

Oryzomys chapmani Thos., Ann. Mag. Nat. Hist., 7th Ser., I, 1898, p. 179. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 238. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 186. Zoöl. Ser.

CHAPMAN'S RICE RAT.

1–5. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

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6–11. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

416. Oryzomys melanotis Thomas.

Oryzomys melanotis Thomas, Ann. Mag. Nat. Hist., 6th Ser., XI, 1893, p. 404. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 243. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 187. Zoöl. Ser.

BLACK-EARED RICE RAT.

1. Adult ♂ Exch. Jalapa, State of Vera Cruz, Mexico. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

417. Oryzomys rostratus Merriam.

Oryzomys rostratus Merr., Proc. Wash. Acad. Scien., III, 1901, p. 293. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 243. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 188. Zoöl. Ser.

BROAD-NOSE RICE RAT.

1–5. Adult ♂ Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.

6. Juv. ♂ Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.

7. Juv. ♀ Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.

418. Oryzomys velutinus Allen & Chapman.

Oryzomys velutinus Allen & Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 214.

TRINIDAD RICE RAT.

1. Adult ♂ Paratype. Exch. Princestown, Island of Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

419. Oryzomys meridensis Thomas.

Oryzomys meridensis Thos., Ann. Mag. Nat. Hist., 6th Ser., XIV, 1894, p. 351.

MERIDA RICE RAT.

1. Adult — P. Venezuela. Deyrolle Fils.

420. Oryzomys maculiventer Allen.

Oryzomys maculiventer Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1899, p. 204.

SPOTTED-BELLY RICE RAT.

1–2. Adult ♂ Paratypes. P. El Libraro, Colombia, S. A. H. H. Smith.

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3–4. Adult ♂ P. Valparaiso, Colombia, S. A. H. H. Smith.
5. Adult ♀ Paratype. P. El Libraro, Colombia, S. A. H. H. Smith.
6–8. Adult — Paratypes. P. El Libraro, Colombia, S. A. H. H. Smith.
9. Adult — P. Valparaiso, Colombia, S. A. H. H. Smith.

421. Oryzomys fulvescens (Saussure).

Hesperomys fulvescens Sauss., Rev. Mag. Zool., 2me Sér., XII, 1860, p. 102.

Oryzomys fulvescens Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 248. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 189. Zoöl. Ser.

FULVOUS RICE RAT.

1. Adult ♂ Exch. Jalapa, State of Vera Cruz, Mexico. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
2–5. Adult ♂ Coll. Xico, State of Vera Cruz, Mexico. N. G. Buxton.
6. Adult ♀ Coll. Xico, State of Vera Cruz, Mexico. N. G. Buxton.
7–8. Adult ♂ Coll. Rio Blanco, State of Vera Cruz, Mexico. N. G. Buxton.
9–10. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
11–12. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

422. Oryzomys stolzmanni Thomas.

Oryzomys longicaudatus Thos., Proc. Zoöl. Soc., 1882, p. 104. (nec Bennett.)

Oryzomys stolzmanni Thos., Ann. Mag. Nat. Hist., 6th Ser., XIV, 1894, p. 357.

STOLZMANN'S RICE RAT.

1. Adult — P. Venezuela. Deyrolle Fils.

Subgenus B. **Oligoryzomys.**

423. Oryzomys costaricensis Allen.

Oryzomys costaricensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 239. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 249, fig. 39. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 189. Zoöl. Ser.

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Oryzomys vegetus Bangs, Bull. Mus. Comp. Zoöl., 1902, p. 35. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 249, fig. 40. Zoöl. Ser.

EL GENERAL RICE-RAT.

1. Adult ♂ Exch. Boruca, Costa Rica. Am. Mus. Nat. Hist. N. Y. G. K. Cherrie.
2–3. Adult ♂ P. Boquete, Chiriqui, Costa Rica. J. H. Batty.
4–6. Adult ♀ P. Boquete, Chiriqui, Costa Rica. J. H. Batty.

424. Oryzomys minutus (Tomes).

Hesperomys minutus Tomes, Proc. Zoöl. Soc., 1860, p. 215.

LEAST RICE RAT.

1. Adult — P. Venezuela. Deyrolle Fils.

Genus 130. **Zygodontomys.**

Zygodontomys Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 38, pl. I, figs. 1–7. Type *Oryzomys cherriei* Allen.

425. Zygodontomys cherrii (Allen).

Oryzomys cherriei Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1895, p. 329.

Zygodontomys cherrii Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 253, figs. 42, XL. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 190. Zoöl. Ser.

CHERRIE'S RICE RAT.

1–2. Adult ♂ Paratypes. Exch. Boruca, Costa Rica. Am. Mus. Nat. Hist. N. Y. G. K. Cherrie.
3. Adult ♀ Paratype. Exch. Boruca, Costa Rica. Am. Mus. Nat. Hist. N. Y. G. K. Cherrie.
4. Adult ♀ P. Boquete, Chiriqui, Costa Rica. J. H. Batty.

426. Zygodontomys chrysomelas (Allen).

Hesperomys (*Habrothrix*) *caliginosus* Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 210. (nec Tomes.)

Oryzomys chrysomelas Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 37.

Zygodontomys chrysomelas Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 253. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 190. Zoöl. Ser.

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SUERRE RICE RAT.

1. Adult ♂ Paratype. Exch. Suerre, Costa Rica. Am. Mus. Nat. Hist. N. Y. A. Alfaro.

427. Zygodontomys brevicaudus (Allen & Chapman).

Oryzomys brevicauda Allen & Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 215.

Zygodontomys brevicauda Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 38.

SHORT-TAILED RICE RAT.

1–3. Adult ♂ Paratypes. Exch. Princestown, Island of Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

4. Adult ♀ Exch. Caura, Island of Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

Genus 131. **Rhithrodontomys. Harvest Mice.**

Reithrodontomys (sic) Giglioli, Ricer. intorn. Distrib. Geogr. Gen. Roma, 1873, p. 160. Type *Mus lecontii* Audubon & Bachman.

428. Rhithrodontomys lecontii (Audubon & Bachman).

Mus lecontii Aud. & Bachm., Jour. Acad. Nat. Scien. Phil., 1842, p. 307.

Reithrodontomys! lecontei Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 148, fig. 33. Zoöl. Ser.

Rhithrodontomys lecontii Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 191. Zoöl. Ser.

LE CONTE'S HARVEST MOUSE.

1. Adult ♂ Coll. White Sulphur Springs, West Virginia. T. Surber.

2. Juv. ♂ Coll. White Sulphur Springs, West Virginia. T. Surber.

3. Adult ♀ Coll. White Sulphur Springs, West Virginia. T. Surber.

4. Adult ♀ Exch. Raleigh, North Carolina. Am. Mus. Nat. Hist. N. Y. H. H. Brimley.

5–6. Adult ♂ Coll. Gainesville, Florida. T. Surber.

7–10. Adult ♀ Coll. Gainesville, Florida. T. Surber.

11. Juv. ♀ Coll. Gainesville, Florida. T. Surber.

a. Rhithrodontomys lecontii impiger Bangs.

Reithrodontomys! lecontii impiger Bangs, Proc. Biol. Soc. Wash., XII, 1898, p. 167. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 149. Zoöl. Ser.

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Rhithrodontomys lecontii impiger Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 191. Zoöl. Ser.

DILIGENT HARVEST MOUSE.

1. Adult ♂ Topotype. Pres. White Sulphur Springs, West Virginia. T. Surber.

b. Rhithrodontomys lecontii dickinsoni (Rhoads).

Reithrodontomys! humilis dickinsoni Rhoads, Amer. Nat., XXIX, 1895, p. 590.

Reithrodontomys! lecontei dickinsoni Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 150. Zoöl. Ser.

Rhithrodontomys lecontii dickinsoni Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 192. Zoöl. Ser.

DICKINSON'S HARVEST MOUSE.

1. Adult ♂ Coll. Enterprise, Florida. T. Surber.

429. Rhithrodontomys dychii Allen.

Ochetodon humilis Coues, Proc. Acad. Nat. Scien. Phil., 1874, p. 185. (nec Aud. & Bachm.)

Reithrodontomys! dychei Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1895, p. 120. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 150. Zoöl. Ser.

Rhithrodontomys dychii Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 192. Zoöl. Ser.

DYCHE'S HARVEST MOUSE.

1–4. Adult ♂ Topotypes. P. Lawrence, Kansas. J. Rowley.
5. Adult ♀ Exch. Perch, Nebraska. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
6. Adult ♂ Exch. Perch, Nebraska. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
7. Adult ♂ P. Boulder, Colorado. R. T. Young.
8. Adult ♀ P. Boulder, Colorado. R. T. Young.
9. Adult ♂ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
10. Adult ♀ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
11–26. Adult ♂ Coll. Alva, Oklahoma Territory. T. Surber.
27–39. Adult ♀ Coll. Alva, Oklahoma Territory. T. Surber.

a. Rhithrodontomys dychii nebrascensis Allen.

Reithrodontomys! dychei nebrascensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1895, p. 122. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 150. Zoöl. Ser.

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Rhithrodontomys dychii nebrascensis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 192. Zoöl. Ser.

NEBRASKA HARVEST MOUSE.

1. Adult ♂ P. Boulder, Colorado. R. T. Young.

430. Rhithrodontomys megalotis (Baird).

Reithrodon! megalotis Baird, N. Am. Mamm., 1857, p. 451.

Reithrodontomys! aztecus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 79.

Reithrodontomys! megalotis deserti Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1895, p. 127.

Reithrodontomys! megalotis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 151. Zoöl. Ser.

Rhithrodontomys megalotis Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 259, figs. 43, XLI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 193. Zoöl. Ser.

FIG. XXXII. RHITHRODONTOMYS MEGALOTIS.
BIG-EARED HARVEST MOUSE.

BIG-EARED HARVEST MOUSE.

1–10. Adult ♂ Coll. Lone Pine, Inyo County, California. E. Heller.

11–12. Adult ♀ Coll. Lone Pine, Inyo County, California. E. Heller.

13. Adult ♀ Coll. Mount Pinos, California. E. Heller.

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14. Adult ♂ Coll. Piru Creek, California. E. Heller.
15–16. Adult ♂ Coll. Fort Tejon, California. E. Heller.
17. Adult ♀ Coll. Fort Tejon, California. E. Heller.
18. Adult ♂ P. Fairbank, Arizona. W. W. Price.
19. Adult ♂ P. Woodfords, Alpine County, California. W. W. Price.
20. Adult ♂ Exch. Bluff City, Utah. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

431. Rhithrodontomys longicaudus (Baird).

Reithrodon! longicauda Baird, N. Am. Mamm., 1857, p. 451.
Reithrodontomys! longicaudus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 151. Zoöl. Ser.
Rhithrodontomys longicaudus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 261. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 195. Zoöl. Ser.

LONG-TAILED HARVEST MOUSE.

1–19. Adult ♂ P. Portola, San Mateo County, California. W. W. Price.
20–37. Adult ♀ P. Portola, San Mateo County, California. W. W. Price.
38–47. Adult ♂ P. Los Angeles, California. J. Rowley.
48–50. Adult ♀ P. Los Angeles, California. J. Rowley.
51. Adult ♂ P. Stanford University, California. W. W Price.
52–55. Adult ♂ Pres. Palo Alto, California. E. Heller.
56. Adult ♂ Coll. Nicasio, California. E. Heller.
57–62. Adult ♂ Topotypes. Coll. Petaluma, California. E. Heller.
63–64. Adult ♀ Topotypes. Coll. Petaluma, California. E. Heller.
65. Adult ♂ Coll. Mendocino, California. E. Heller.
66. Adult ♂ Coll. Eureka, California. E. Heller.
67. Adult ♀ P. Alum Rock Park, Santa Clara County, California. W. W. Price.
68. Adult ♀ P. Chiricahua Mountains, Arizona. W. W. Price.

a. Rhithrodontomys longicaudus pallidus (Rhoads).

Reithrodontomys! pallidus Rhoads, Amer. Nat., 1893, p. 835.
Reithrodontomys! longicaudus pallidus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 152. Zoöl. Ser.
Rhithrodontomys longicaudus pallidus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 262. Zoöl. Ser.

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Id. Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 195. Zoöl. Ser.

PALLID HARVEST MOUSE.

1–3. Adult ♂ Coll. Oro Grande, Mohave Desert, California. E. Heller.

4–9. Adult ♀ Coll. Oro Grande, Mohave Desert, California. E. Heller.

10. Adult ♂ Coll. Trinidad, Lower California, Mexico. E. Heller.

11. Adult ♂ Coll. Las Eucinas, Lower California, Mexico. E. Heller.

432. Rhithrodontomys chrysotis Elliot.

Reithrodontomys! chrysotis Elliot, Pub. Field Columb. Mus., I, 1899, p. 281. Zoöl. Ser. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 152. Zoöl. Ser.

Rhithrodontomys chrysotis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 195. Zoöl. Ser.

GOLDEN-EARED HARVEST MOUSE.

1–3. Adult ♂ Type and paratypes. Coll. Dougherty, Indian Territory. T. Surber.

4. Adult ♀ Paratype. Coll. Dougherty, Indian Territory. T. Surber.

433. Rhithrodontomys catalinæ Elliot.

Rhithrodontomys catalinæ Elliot, Pub. Field Columb. Mus., III, 1903, p. 246. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 195. Zoöl. Ser.

SANTA CATALINA ISLAND HARVEST MOUSE.

1. Adult ♂ Type. P. Santa Catalina Island, California. J. Rowley.

434. Rhithrodontomys klamathensis Merriam.

Reithrodontomys! klamathensis Merr., N. Am. Faun., No. 16, 1899, p. 93. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 152. Zoöl. Ser.

Rhithrodontomys klamathensis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 196. Zoöl. Ser.

KLAMATH HARVEST MOUSE.

1. Adult ♀ Coll. Grant's Pass, Oregon. E. Heller.

435. Rhithrodontomys arizonensis Allen.

Reithrodontomys! longicaudus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1894, p. 320. Ex Arizona. (nec Baïrd.)

Reithrodontomys! arizonensis Allen, Bull. Am. Mus. Nat. Hist.

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N. Y., 1895, p. 134. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 153. Zoöl. Ser.

Rhithrodontomys arizonensis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 196. Zoöl. Ser.

ARIZONA HARVEST MOUSE.

1–2. Adult ♂ P. Chiricahua Mountains, Arizona. B. C. Condit.

3. Adult ♀ P. Chiricahua Mountains, Arizona. B. C. Condit.

436. Rhithrodontomys saturatus Allen & Chapman.

Reithrodontomys! saturatus Allen & Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 201.

Rhithrodontomys saturatus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 262. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 196. Zoöl. Ser.

LAS VIGAS HARVEST MOUSE.

1–4. Adult ♂ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber.

5–6. Adult ♀ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber.

7. Adult ♂ Coll. Mount Orizaba, State of Vera Cruz, Mexico. Heller & Barber.

437. Rhithrodontomys peninsulæ Elliot.

Rhithrodontomys peninsulæ Elliot, Pub. Field Columb. Mus., III, 1903, p. 164. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 263. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 197. Zoöl. Ser.

PENINSULAR HARVEST MOUSE.

1–9. Adult ♂ Paratypes. Coll. San Quentin, Lower California, Mexico. E. Heller.

10–15. Adult ♀ Type and paratypes. Coll. San Quentin, Lower California, Mexico. E. Heller.

438. Rhithrodontomys difficilis Merriam.

Reithrodontomys! difficilis Merr., Proc. Wash. Acad. Scien., III, 1901, p. 556.

Rhithrodontomys difficilis Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 263. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 197. Zoöl. Ser.

CAPTIOUS HARVEST MOUSE.

1–2. Adult ♀ Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.

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a. Rhithrodontomys mexicanus fulvescens Allen.

Reithrodontomys! mexicanus fulvescens Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1894, p. 319.

Rhithrodontomys mexicanus fulvescens Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 264. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 198. Zoöl. Ser.

OPOSURA HARVEST MOUSE.

1–2. Adult ♂ P. Providentia Mines, State of Sonora, Mexico. J. Rowley.

3. Adult ♀ P. Providentia Mines, State of Sonora, Mexico. J. Rowley.

4. Adult ♀ Topotype. P. Oposura, State of Sonora, Mexico. B. C. Condit.

439. Rhithrodontomys laceyi Allen.

Reithrodontomys! laceyi Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1896, p. 235. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 153. Zoöl. Ser.

Rhithrodontomys laceyi Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 199. Zoöl. Ser.

LACEY'S HARVEST MOUSE.

1. Adult ♀ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

440. Rhithrodontomys costaricensis Allen.

Reithrodontomys! costaricensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1895, p. 139.

Rhithrodontomys costaricensis Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 267. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 200. Zoöl. Ser.

COSTA RICA HARVEST MOUSE.

1. Adult ♀ Exch. San José, Costa Rica. Am. Mus. Nat. Hist. N. Y. A. Alfaro.

2–4. Adult ♂ P. Boquete, Chiriqui, Costa Rica. J. H. Batty.

5–6. Adult ♀ P. Boquete, Chiriqui, Costa Rica. J. H. Batty.

441. Rhithrodontomys rufescens Allen & Chapman.

Reithrodontomys! rufescens Allen & Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 199.

Rhithrodontomys rufescens Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 268. Zoöl. Ser. *Id.*

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Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 201. Zoöl. Ser.

RUFOUS HARVEST MOUSE.

1. Adult ♂ Paratype. Exch. Jalapa, State of Vera Cruz, Mexico. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

a. Rhithrodontomys griseiflavus helvolus Merriam.

Reithrodontomys! griseoflavus helvolus Merr., Proc. Wash. Acad. Scien., III, 1901, p. 554.

Rhithrodontomys griseiflavus helvolus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 270. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 202. Zoöl. Ser.

OAXACA HARVEST MOUSE.

1. Adult ♂ Coll. Ocotlan, State of Jalisco, Mexico. F. E. Lutz.

442. Rhithrodontomys amœnus Elliot.

Rhithrodontomys amœnus Elliot, Proc. Biol. Soc. Wash., XVIII, 1905, p. 234.

ATTRACTIVE HARVEST MOUSE.

1. Adult ♀ Type. Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.

443. Rhithrodontomys inexpectatus Elliot.

Rhithrodontomys inexpectatus Elliot, Pub. Field Columb. Mus., III, 1903, p. 145. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 271. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 203. Zoöl. Ser.

PATZCUARO HARVEST MOUSE.

1. Adult ♂ Type. Coll. Patzcuaro, State of Michoacan, Mexico. F. E. Lutz.

Genus 132. **Ichthyomys.**

Ichthyomys Thomas, Proc. Zoöl. Soc., 1893, p. 337. Type *Ichthyomys stolzmanni* Thomas.

444. Ichthyomys hydrobates (Winge).

Habrothrix hydrobates Winge, Vid. Med. Kjobenh., 1891, p. 1, pl. 1.

WINGE'S FISH-EATING RAT.

1. Juv. — P. Venezuela. Deyrolle Fils.

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Genus 133. **Acodon.**

Akodon! Meyen, Nova Acta Phys. Med. Acad. Cæs. Leop.-Carol., XVI, 1833, p. 599, tab. XLIII, fig. 1. Type *Akodon! boliviense* Meyen.

Abrothrix (sic) Waterh., Proc. Zoöl. Soc., 1837, p. 21.

445. Acodon teguina (Alston).

Hesperomys teguina Alston, Proc. Zoöl. Soc., 1876, p. 755.

Acodon teguina Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. 1, 1904, p. 273, figs. 44, XLII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 204. Zoöl. Ser.

ALSTON'S MOUSE.

1. Adult — P. Costa Rica. E. Gerrard & Sons.

446. Acodon urichi Allen & Chapman.

Abrothrix! caliginosus Allen & Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 217. (nec Tomes.)

Akodon! urichi Allen & Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 19.

URICH'S MOUSE.

1. Adult ♀ Exch. Princestown, Island of Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

Genus 134. **Oxymycterus.**

Oxymycterus Waterh., Proc. Zoöl. Soc., 1837, p. 21. Type *Mus nasutus* Waterhouse.

447. Oxymycterus nasutus (Waterhouse).

Mus nasutus Waterh., Proc. Zoöl. Soc., 1837, p. 16.

LONG-NOSED RAT.

1. Adult — P. Argentine Republic. Ward's Nat. Scien. Establ., Rochester, N. Y.

Subfamily V. **Neotominæ. Wood Rats.**

Genus 135. **Neotoma.**

Neotoma Say & Ord, Jour. Acad. Nat. Scien. Phil., IV, 1825, p. 345. Type *Mus floridana* Ord.

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448. Neotoma fuscipes Baird.

Neotoma fuscipes Baird, N. Am. Mamm, 1857, p. 495. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 158. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 278. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 206. Zoöl. Ser.

Neotoma monochroura! Rhoads, Amer. Nat., XXVIII, 1894, p. 67.

Neotoma splendens True, Proc. U. S. Nat. Mus., 1894, p. 353.

DUSKY-FOOTED WOOD RAT.

1–26. Adult ♂ P. Portola, San Mateo County, California. W. W. Price.
27–51. Adult ♀ P. Portola, San Mateo County, California. W. W. Price.
52. Juv. ♂ P. Portola, San Mateo County, California. W. W. Price.
53–54. Juv. ♀ P. Portola, San Mateo County, California. W. W. Price.
55–60. Adult ♂ Coll. Nicasio, California. E. Heller.
61–63. Adult ♀ Coll. Nicasio, California. E. Heller.
64. Adult ♂ Coll. Mendocino, California. E. Heller.
65. Adult ♀ Coll. Mendocino, California. E. Heller.
66–68. Adult ♂ Coll. Point Reyes, California. E. Heller.
69. Adult ♀ Coll. Point Reyes, California. E. Heller.
70–73. Adult ♂ Topotypes. Coll. Petaluma, California. E. Heller.
74–77. Adult ♀ Topotypes. Coll. Petaluma, California. E. Heller.
78–80. Adult ♂ Pres. Palo Alto, California. E. Heller.
81. Juv. ♂ Pres. Palo Alto, California. E. Heller.
82–85. Adult ♀ Pres. Palo Alto, California. E. Heller.
86. Adult ♂ P. Stanford University, Palo Alto, California. W. W. Price.
87. Adult ♂ P. Cedro Place, California. G. A. Coleman.
88. Juv. ♂ P. Stevens Creek, California. G. A. Coleman.
89. Adult ♂ Coll. Requa, California. E. Heller.
90–92. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.
93–98. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
99–100. Adult ♂ Coll. Grant's Pass, Oregon. E. Heller.

a. Neotoma fuscipes macrotis (Thomas).

Neotoma macrotis Thomas, Ann. Mag. Nat. Hist., 6th Ser., XII, 1893, p. 234.

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Neotoma macrotis simplex True, Proc. U. S. Nat. Mus., 1894, p. 354.

Neotoma fuscipes macrotis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 159. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 279. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 206. Zoöl. Ser.

LARGE-EARED WOOD RAT.

1–14. Adult ♂ P. Carmel River, Monterey County, California. W. W. Price.

15–30. Adult ♀ P. Carmel River, Monterey County, California. W. W. Price.

31–35. Juv. ♂ P. Carmel River, Monterey County, California. W. W. Price.

36–39. Juv. ♀ P. Carmel River, Monterey County, California. W. W. Price.

40–41. Adult ♂ P. San Antonio, San Bernardino County, California. W. W. Price.

42. Adult ♀ P. San Antonio, San Bernardino County, California. W. W. Price.

43. Juv. ♀ P. San Antonio, San Bernardino County, California. W. W. Price.

44. Adult ♀ Coll. Whitewater, San Bernardino County, California. E. Heller.

45–46. Adult ♂ Coll. Ensenada, Lower California, Mexico. E. Heller.

47. Adult ♀ Coll. Aguaje de las Fresas, Lower California, Mexico. E. Heller.

48. Adult ♀ Coll. San Antonio, Lower California, Mexico. E. Heller.

49. Adult ♂ Coll. La Grulla, Lower California, Mexico. E. Heller.

50. Adult ♂ Coll. Santa Eulalia, Lower California, Mexico. E. Heller.

51–52. Adult ♀ Coll. Santa Eulalia, Lower California, Mexico. E. Heller.

53–55. Adult ♂ Coll. Rosarito Divide, Lower California, Mexico. E. Heller.

56–57. Adult ♀ Coll. Palomar, Lower California, Mexico. E. Heller.

b. Neotoma fuscipes streatori Merriam.

Neotoma fuscipes streatori Merr., Proc. Biol. Soc. Wash., IX, 1894,

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p. 124. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 159. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 206. Zoöl. Ser.

STREATOR'S WOOD RAT.

1–3. Adult ♂ P. Snow Mountains, Colusa County, California. W. W. Price.

4–6. Adult ♀ P. Snow Mountains, Colusa County, California. W. W. Price.

7–10. Juv. ♂ P. Snow Mountains, Colusa County, California. W. W. Price.

11–13. Juv. ♀ P. Snow Mountains, Colusa County, California. W. W. Price.

c. *Neotoma fuscipes dispar* Merriam.

Neotoma fuscipes dispar Merr., Proc. Biol. Soc. Wash., IX, 1894, p. 124. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 160. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 206. Zoöl. Ser.

DISSIMILAR WOOD RAT.

1–3. Adult ♂ Coll. Lone Pine, Inyo County, California. E. Heller.

4–11. Adult ♀ Coll. Lone Pine, Inyo County, California. E. Heller.

12. Adult ♀ Coll. Hot Spring, Mt. Whitney, California. E. Heller.

d. *Neotoma fuscipes annectens* Elliot.

Neotoma fuscipes annectens Elliot, Pub. Field Columb. Mus., I, 1898, p. 201. Zoöl. Ser. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 160. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 206. Zoöl. Ser.

ALLIED WOOD RAT.

1–11. Adult ♂ Type and paratypes. P. Portola, San Mateo County, California. W. W. Price.

12–17. Adult ♀ Paratypes. P. Portola, San Mateo County, California. W. W. Price.

e. *Neotoma fuscipes affinis* Elliot.

Neotoma fuscipes affinis Elliot, Pub. Field Columb. Mus., I, 1898, p. 202. Zoöl. Ser. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 160. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 207. Zoöl. Ser.

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RELATED WOOD RAT.

1–10. Adult ♂ Type and paratypes. P. Alum Rock Park, Santa Clara County, California. W. W. Price.

11–24. Adult ♀ Paratypes. P. Alum Rock Park, Santa Clara County, California. W. W. Price.

25–28. Juv. ♀ Paratypes. P. Alum Rock Park, Santa Clara County, California. W. W. Price.

29. Juv. ♂ Paratype. P. Alum Rock Park, Santa Clara County, California. W. W. Price.

30–31. Adult ♂ P. Mt. Hamilton, Santa Clara County, California. W. W. Price.

32–35. Adult ♀ P. Mt. Hamilton, Santa Clara County, California. W. W. Price.

449. Neotoma mohavensis (Elliot).

Neotoma fuscipes mohavensis Elliot, Pub. Field Columb. Mus., III, 1903, p. 246. Zoöl. Ser.

Neotoma mohavensis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 207. Zoöl. Ser.

MOHAVE DESERT WOOD RAT.

1–3. Adult ♂ Paratypes. Coll. Oro Grande, Mohave Desert, California. E. Heller.

4–7. Adult ♀ Type and paratypes. Coll. Oro Grande, Mohave Desert, California. E. Heller.

450. Neotoma cnemophila (Elliot).

Neotoma fuscipes cnemophila Elliot, Pub. Field Columb. Mus., III, 1904, p. 267. Zoöl. Ser.

Neotoma cnemophila Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 207. Zoöl. Ser.

MOUNT PINOS WOOD RAT.

1–3. Adult ♂ Type and paratypes. Coll. Mount Pinos, Lockwood Valley, California. E. Heller.

4–5. Adult ♀ Paratypes. Coll. Mount Pinos, Lockwood Valley, California. E. Heller.

6. Adult ♀ Coll. Bailey's Ranch, Piru Creek, California. E. Heller.

7–8. Adult ♂ Coll. Castac Lake, Piru Creek, California. E. Heller.

451. Neotoma micropus Baird.

Neotoma micropus Baird, Proc. Acad. Nat. Scien. Phil., 1855, p. 333. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 155. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C.

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M. Pub., IV, Pt. I, 1904, p. 281, figs. 45, XLIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 208. Zoöl. Ser.

FIG. XXXIII. NEOTOMA MICROPUS. SMALL-FOOTED WOOD RAT.

SMALL-FOOTED WOOD RAT.

1. Adult ♂ Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
2. Adult ♀ Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
3. Adult ♂ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

4–5. Adult ♀ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

6. Adult ♀ Exch. Corpus Christi, Texas. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
7. Adult ♀ Exch. Brownsville, Texas. Am. Mus. Nat. Hist. N. Y. F. Armstrong.
8. Adult ♂ Coll. Xaral, State of Coahuila, Mexico. Heller & Barber.

a. Neotoma micropus surberi Elliot.

Neotoma micropus surberi Elliot, Pub. Field Columb. Mus., I, 1899, p. 279. Zoöl. Ser. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 156. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 209. Zoöl. Ser.

SURBER'S WOOD RAT.

1. Adult ♂ Type. Coll. Cañon 3 miles west of Alva, Oklahoma Territory. T. Surber.

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2. Adult ♀ Paratype. Coll. Cañon 3 miles west of Alva, Oklahoma Territory. T. Surber.
3–9. Adult ♂ Coll. White Horse Spring, Oklahoma Territory. T. Surber.
10–16. Adult ♀ Coll. White Horse Spring, Oklahoma Territory. T. Surber.
17–19. Juv. ♂ Coll. White Horse Spring, Oklahoma Territory. T. Surber.
20–22. Juv. ♀ Coll. White Horse Spring, Oklahoma Territory. T. Surber.

452. Neotoma baileyi Merriam.

Neotoma baileyi Merr., Proc. Biol. Soc. Wash., IX, 1894, p. 123. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 210. Zoöl. Ser.

Neotoma campestris baileyi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 156. Zoöl. Ser.

BAILEY'S WOOD RAT.

1–2. Adult ♂ Coll. Noble, Oklahoma Territory. T. Surber.
3–4. Adult ♀ Coll. Noble, Oklahoma Territory. T. Surber.
5–8. Adult ♂ Coll. Dougherty, Oklahoma Territory. T. Surber.
9–10. Adult ♀ Coll. Dougherty, Oklahoma Territory. T. Surber.

453. Neotoma floridana (Ord).

Mus floridana Ord, Bull. Soc. Philom. Paris, 1818, p. 181.

Arvicola floridana Harl., Faun. Amer., 1825, p. 141.

Neotoma floridana Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 157, fig. 34. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 209. Zoöl. Ser.

FLORIDA WOOD RAT.

1. Adult — Exch. Gainesville, Florida. Am. Mus. Nat. Hist. N. Y. J. Robertson.
2. Adult ♂ Exch. Enterprise, Florida. Am. Mus. Nat. Hist. N. Y. C. L. Brownell.
3–4. Adult ♂ Coll. Gainesville, Florida. T. Surber.
5. Adult ♀ Coll. Gainesville, Florida. T. Surber.
6. Juv. ♀ Coll. Enterprise, Florida. T. Surber.
7. Adult ♀ Coll. Enterprise, Florida. T. Surber.
8–10. Adult ♂ Coll. Riceboro, Georgia. T. Surber.
11–12. Adult ♀ Coll. Riceboro, Georgia. T. Surber.
13. Juv. ♂ Coll. Riceboro, Georgia. T. Surber.

a. Neotoma floridana attwateri (Mearns).

Neotoma attwateri Mearns, Proc. U. S. Nat. Mus., 1897, p. 721.

Neotoma floridana attwateri Elliot, Syn. N. Am. Mamm., F. C. M.

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Pub., II, 1901, p. 157. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 210. Zoöl. Ser.

ATTWATER'S WOOD RAT.

1. Adult ♂ Topotype. Exch. Turtle Creek, Kerr County, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

454. Neotoma pennsylvanica Stone.

Neotoma pennsylvanica Stone, Proc. Acad. Nat. Scien. Phil., 1893, p. 16. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 157. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 210. Zoöl. Ser.

PENNSYLVANIA WOOD RAT.

1. Adult ♂ P. White Sulphur Springs, West Virginia. T. Surber.
2. Adult ♀ Pres. White Sulphur Springs, West Virginia. T. Surber.
3. Adult ♂ Coll. White Sulphur Springs, West Virginia. T. Surber.
4–9. Adult ♀ Coll. White Sulphur Springs, West Virginia. T. Surber.
10–12. Juv. ♂ Coll. White Sulphur Springs, West Virginia. T. Surber.

455. Neotoma mexicana Baird.

Neotoma mexicana Baird, Proc. Acad. Nat. Scien. Phil., 1855, p. 333. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 158. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 282. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 213. Zoöl. Ser.

MEXICAN WOOD RAT.

1–5. Adult ♂ P. Huachuca Mountains, Arizona. W. W. Price.
6–7. Adult ♀ P. Huachuca Mountains, Arizona. W. W. Price.
8. Juv. ♂ P. Huachuca Mountains, Arizona. W. W. Price.
9. Juv. ♀ P. Huachuca Mountains, Arizona. W. W. Price.
10. Adult ♂ P. Show Low, Arizona. W. W. Price.
11. Adult ♀ P. Show Low, Arizona. W. W. Price.
12–13. Adult ♀ P. Fairbank, Arizona. W. W. Price.
14. Adult ♂ P. S–B. Ranch, Arizona. W. W. Price.
15. Adult ♀ P. S–B. Ranch, Arizona. W. W. Price.
16–19. Adult ♂ P. Chiricahua Mountains, Arizona. W. W. Price.
20–24. Adult ♀ P. Chiricahua Mountains, Arizona. W. W. Price.

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25–27. Adult ♂ P. White Mountains, Arizona. W. W. Price.
28–29. Adult ♀ P. White Mountains, Arizona. W. W. Price.

a. Neotoma mexicana madrensis Goldman.

Neotoma mexicana madrensis Goldm., Proc. Biol. Soc. Wash., XVIII, 1905, p. 31. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 213. Zoöl. Ser.

SIERRA MADRE WOOD RAT.

1–3. Adult ♂ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.
4–6. Adult ♀ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

456. Neotoma grandis (Elliot).

Neotoma desertorum grandis Elliot, Pub. Field Columb. Mus., III, 1903, p. 247. Zoöl. Ser.

Neotoma grandis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 215. Zoöl. Ser.

CAMERON LAKE WOOD RAT.

1–2. Adult ♂ Type and paratype. P. Cameron Lake, Colorado Desert, California. F. Stephens.
3. Adult ♂ P. Borego Springs, San Diego County, California. F. Stephens.
4. Adult ♂ P. Jamul Ranch, San Diego County, California. F. Stephens.
5. Juv. ♀ P. Witch Creek, Colorado Desert, California. F. Stephens.

457. Neotoma desertorum Merriam.

Neotoma desertorum Merr., Proc. Biol. Soc. Wash., IX, 1894, p. 125. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 161. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 215. Zoöl. Ser.

DEATH VALLEY WOOD RAT.

1–3. Adult ♂ Coll. Lone Willow Springs, California. E. Heller.
4–5. Adult ♀ Coll. Lone Willow Springs, California. E. Heller.
6–7. Adult ♂ Coll. Copper City, California. E. Heller.
8. Adult ♀ Coll. Copper City, California. E. Heller.
9–10. Adult ♂ Coll. Coal Kilns, Panamint Mts., California. E. Heller.
11. Adult ♀ Coll. Coal Kilns, Panamint Mts., California. E. Heller.

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12–16. Adult ♂ Coll. Hannopee Cañon, Panamint Mts., California. E. Heller.
17. Adult ♀ Coll. Hannopee Cañon, Panamint Mts., California. E. Heller.
18–23. Adult ♂ Topotypes. Coll. Furnace Creek, Death Valley, California. E. Heller.
24–25. Adult ♀ Topotypes. Coll. Furnace Creek, Death Valley, California. E. Heller.
26–29. Adult ♂ Coll. Beveridge Cañon, Inyo Mts., California. E. Heller.
30. Adult ♀ Coll. Beveridge Cañon, Inyo Mts., California. E. Heller.
31. Adult ♂ Coll. Inyo Mts., summits E. of Lone Pine, California. E. Heller.
32–33. Adult ♀ Coll. Inyo Mts., summits E. of Lone Pine, California. E. Heller.
34. Adult ♂ Coll. Coso Mountains, California. E. Heller.
35. Adult ♀ Coll. Coso Mountains, California. E. Heller.
36. Adult ♂ Coll. Mesquite Valley, California. E. Heller.
37. Adult ♂ Coll. Lone Pine, Owens Valley, California. E. Heller.
38–39. Adult ♀ Coll. Lone Pine, Owens Valley, California. E. Heller.
40–41. Juv. ♂ P. Candelaria, Nevada. J. Rowley.
42. Adult ♀ P. Candelaria, Nevada. J. Rowley.

a. Neotoma desertorum sola Merriam.

Neotoma desertorum sola Merr., Proc. Biol. Soc. Wash., IX, 1894, p. 126. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 161. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 215. Zoöl. Ser.

LONELY WOOD RAT.

1–5. Adult ♂ Coll. Fort Tejon, California. E. Heller.
6–17. Adult ♀ Coll. Fort Tejon, California. E. Heller.

458. Neotoma fallax Merriam.

Neotoma fallax Merr., Proc. Biol. Soc. Wash., IX, 1894, p. 123. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 161. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 216. Zoöl. Ser.

DECEITFUL WOOD RAT.

1–3. Adult ♂ P. Boulder Creek, Colorado. R. T. Young.
4–6. Adult ♀ P. Boulder, Colorado. R. T. Young.
7. Juv. ♀ P. Boulder, Colorado. R. T. Young.

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459. Neotoma intermedia Rhoads.

Neotoma intermedia Rhoads, Amer. Nat., XXVIII, 1894, p. 69. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 161. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 284. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 216. Zoöl. Ser.

Neotoma californica Price, Proc. Calif. Acad. Scien., 1894, p. 154, pl. XI.

RHOADS'S WOOD RAT.

1–7. Adult ♂ P. Riverside, California. E. Heller.

8–10. Adult ♀ P. Riverside, California. E. Heller.

11–12. Adult ♂ P. Anderson's Ranch, Douglas County, Nevada. W. W. Price.

13. Adult ♀ P. Anderson's Ranch, Douglas County, Nevada. W. W. Price.

14–16. Adult ♂ P. San Antonio, San Bernardino County, California. W. W. Price.

17–18. Adult ♀ P. San Antonio, San Bernardino County, California. W. W. Price.

19. Adult ♀ P. Jamul, San Diego County, California. W. W. Price.

20. Adult ♂ Exch. Sanos Cedros, Lower California, Mexico. Am. Mus. Nat. Hist. N. Y. F. X. Holzner.

21. Adult ♀ Exch. Sanos Cedros, Lower California, Mexico Am. Mus. Nat. Hist. N. Y. F. X. Holzner.

22. Adult ♂ Coll. Hanson Lagoon, Lower California, Mexico. E. Heller.

23–24. Adult ♀ Coll. Hanson Lagoon, Lower California, Mexico. E. Heller.

25. Adult ♂ Coll. San Matias Spring, Lower California, Mexico. E. Heller.

26. Adult ♀ Coll. San Matias Spring, Lower California, Mexico. E. Heller.

27–28. Adult ♂ Coll. Head of San Antonio River, Lower California, Mexico. E. Heller.

29–30. Adult ♀ Coll. Head of San Antonio River, Lower California, Mexico. E. Heller.

31. Adult ♂ Coll. San Antonio, Lower California, Mexico. E. Heller.

32–34. Adult ♀ Coll. San Antonio, Lower California, Mexico. E. Heller.

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35. Adult ♂ Coll. Aqua Escondido, Lower California, Mexico. E. Heller.
36. Adult ♀ Coll. Aqua Escondido, Lower California, Mexico. E. Heller.
37. Adult ♂ Coll. Rosarito, Lower California, Mexico. E. Heller.
38–39. Adult ♀ Coll. Rosarito, Lower California, Mexico. E. Heller.
40. Adult ♂ Coll. Rosarito Divide, Lower California, Mexico. E. Heller.
41–42. Adult ♂ Coll. Santa Eulalia, Lower California, Mexico. E. Heller.
43–49. Adult ♀ Coll. Santa Eulalia, Lower California, Mexico. E. Heller.
50–52. Adult ♂ Coll. Vallecitos, Lower California, Mexico. E. Heller.
53–57. Adult ♀ Coll. Vallecitos, Lower California, Mexico. E. Heller.
58. Adult ♂ Coll. La Grulla, Lower California, Mexico. E. Heller.
59. Adult ♀ Coll. La Grulla, Lower California, Mexico. E. Heller.
60–62. Adult ♂ Coll. Parral, Lower California, Mexico. E. Heller.
63–66. Adult ♀ Coll. Parral, Lower California, Mexico. E. Heller.
67. Adult ♂ Coll. San Quentin, Lower California, Mexico. E. Heller.
68–70. Adult ♀ Coll. San Quentin, Lower California, Mexico. E. Heller.
71. Adult ♂ Coll. El Alamo, Lower California, Mexico. E. Heller.
72–73. Adult ♂ Coll. Ensenada, Lower California, Mexico. E. Heller.
74. Adult ♀ Coll. Ensenada, Lower California, Mexico. E. Heller.
75. Adult ♂ Coll. Santa Rosa, Lower California, Mexico. E. Heller.

a. Neotoma intermedia gilva Rhoads.

Neotoma intermedia gilva Rhoads, Amer. Nat., XXVIII, 1894, p. 70. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 162. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 217. Zoöl. Ser.

Neotoma venusta True, Proc. U. S. Nat. Mus., 1894, p. 354.

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YELLOW WOOD RAT.

1. Adult ♂ Exch. Jacumba, San Diego County, California. Am. Mus. Nat. Hist. N. Y. F. X. Holzner.
2. Adult ♀ Exch. Jacumba, San Diego County, California. Am. Mus. Nat. Hist. N. Y. F. X. Holzner.
3. Juv. ♀ Exch. Palmetto Springs, San Diego County, California. Am. Mus. Nat. Hist. N. Y. F. Stephens.

4–7. Adult ♂ Coll. Whitewater, San Diego County, California. E. Heller.

8–13. Adult ♀ Coll. Whitewater, San Diego County, California. E. Heller.

b. Neotoma intermedia albigula (Hartley).

Neotoma albigula Hartley, Proc. Calif. Acad. Scien., 2nd Ser., IV, 1894, p. 157, pl. XII.

Neotoma intermedia albigula Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 162. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 285. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 217. Zoöl. Ser.

WHITE-THROATED WOOD RAT.

1. Adult ♂ Exch. Bradshaw City, Arizona. Am. Mus. Nat. Hist. N. Y. Price & Condit.
2. Adult ♀ Exch. Bradshaw City, Arizona. Am. Mus. Nat. Hist. N. Y. H. H. Kaey.

3–4. Adult ♂ P. Providentia Mines, State of Sonora, Mexico. J. Rowley.

5–7. Adult ♀ P. Providentia Mines, State of Sonora, Mexico. J. Rowley.

8. Adult ♂ P. Cerro Blanco, State of Sonora, Mexico. J. Rowley.
9. Adult ♂ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

460. Neotoma campestris Allen.

Neotoma campestris Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1894, p. 322. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 156. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 218. Zoöl. Ser.

FIELD WOOD RAT.

1. Adult ♀ Paratype. Exch. Pendennis, Kansas. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
2. Juv. ♂ Paratype. Exch. Pendennis, Kansas. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

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461. Neotoma bella Bangs.

Neotoma bella Bangs, Proc. N. Eng. Zoöl. Club, I, 1899, p. 66. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, Append., p. 429. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 218. Zoöl. Ser.

BEAUTIFUL WOOD RAT.

1–5. Adult ♂ Coll. Morongo Pass, California. E. Heller.
6. Adult ♀ Coll. Morongo Pass, California. E. Heller.
7–8. Adult ♀ Coll. Whitewater, California. E. Heller.
9–12. Adult ♂ Topotypes. Coll. Palm Springs, California. E. Heller.
13–19. Adult ♀ Topotypes. Coll. Palm Springs, California. E. Heller.
20. Adult ♂ Coll. Burn's Cañon, California. E. Heller.
21. Adult ♀ Coll. Old Woman's Spring, California. E. Heller.
22. Adult ♂ Coll. Warren's Well, California. E. Heller.
23. Adult ♂ Coll. Oro Grande, California. E. Heller.
24–25. Adult ♀ Coll. Oro Grande, California. E. Heller.

a. Neotoma bella felipensis Elliot.

Neotoma bella felipensis Elliot, Pub. Field Columb. Mus., III, 1903, p. 217. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 286. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 218. Zoöl. Ser.

SAN FELIPE DESERT RAT.

1–8. Adult ♂ Type and paratypes. Coll. San Felipe, Lower California, Mexico. E. Heller.
9–15. Adult ♀ Paratypes. Coll. San Felipe, Lower California, Mexico. E. Heller.
16. Adult ♂ Coll. Cañon Viento, Lower California, Mexico. E. Heller.
17. Adult ♂ Coll. Parral, Lower California, Mexico. E. Heller.
18–21. Adult ♀ Coll. Palomar, Lower California, Mexico. E. Heller

462. Neotoma orizabæ Merriam.

Neotoma orizabæ Merr., Proc. Biol. Soc. Wash., IX, 1894, p. 122. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 286. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 219. Zoöl. Ser.

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ORIZABA WOOD RAT.

1–2. Adult ♂ Coll. Mt. Orizaba, State of Vera Cruz, Mexico. Heller & Barber.

3–4. Adult ♀ Coll. Mt. Orizaba, State of Vera Cruz, Mexico. Heller & Barber.

5–6. Adult ♂ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber.

463. Neotoma goldmani Merriam.

Neotoma goldmani Merr., Proc. Biol. Soc. Wash., XVI, 1903, p. 48. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 288. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 220. Zoöl. Ser.

GOLDMAN'S WOOD RAT.

1. Adult ♂ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

2. Adult ♀ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

3–4. Juv. ♀ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

Genus 136. **Teonoma. Bushy-tailed Wood Rats.**

Teonoma Gray, List Spec. Mamm. Brit. Mus., 1843, p. 117. Type *Myoxus drummondi* Richardson.

464. Teonoma cinerea (Ord).

Mus cinerea Ord, Guth. Geogr., 2nd Am. ed., II, 1815, p. 292.

Neotoma cinerea Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 163, fig. 35. Zoöl. Ser.

Teonoma cinerea Elliot, Check-L. Mamm. N. Am. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 220. Zoöl. Ser.

GRAY BUSHY-TAILED WOOD RAT.

1–7. Adult ♂ P. Woodfords, Alpine County, California. W. W. Price.

8–12. Adult ♀ P. Woodfords, Alpine County, California. W. W. Price.

13. Juv. ♂ P. Woodfords, Alpine County, California. W. W. Price.

14–17. Juv. ♀ P. Woodfords, Alpine County, California. W. W. Price.

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18. Adult ♂ P. Canadian National Park, Alberta, Canada. G. F. Dippie.
19. Juv. ♂ P. Canadian National Park, Alberta, Canada. G. F. Dippie.
20. Adult — P. Montana. Ward's Nat. Scien. Establ., Rochester, N. Y.
21. Juv. ♂ P. Jackson Lake, Wyoming. T. R. Wilson.

a. Teonoma cinerea drummondi (Richardson).

Myoxus drummondi Rich., Zoöl. Jour., III, 1828, p. 517.

Neotoma cinerea drummondi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 164. Zoöl. Ser.

Teonoma cinerea drummondi Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, VI, 1905, p. 221. Zoöl. Ser.

DRUMMOND'S BUSHY-TAILED WOOD RAT.

1. Adult ♂ P. Willow River, Cariboo, British Columbia, Canada. C. K. Worthern.
2. Adult ♂ P. Carpenter's Mountain, Cariboo, British Columbia, Canada. C. K. Worthern.
3. Adult ♀ P. Carpenter's Mountain, Cariboo, British Columbia, Canada. C. K. Worthern.

b. Teonoma cinerea occidentalis (Baird).

Neotoma occidentalis Baird, Proc. Acad. Nat. Scien. Phil., 1855, p. 335.

Neotoma cinerea occidentalis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 164. Zoöl. Ser.

Teonoma cinerea occidentalis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 221. Zoöl. Ser.

WESTERN BUSHY-TAILED WOOD RAT.

1–4. Adult ♂ Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.
5–6. Adult ♀ Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.
7–12. Juv. ♂ Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.
13–14. Juv. ♀ Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.
15–18. Adult ♂ Coll. Boulder Creek, Clallam County, Washington. D. G. Elliot.
19. Adult ♀ Coll. Boulder Creek, Clallam County, Washington. D. G. Elliot.
20–21. Juv. ♀ Coll. Boulder Creek, Clallam County, Washington. D. G. Elliot.

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22. Juv. ♂ Coll. Johnson's Ranch, Clallam County, Washington. D. G. Elliot.
23. Adult ♂ Coll. Campbell's Ranch, Clallam County, Washington. D. G. Elliot.
24–25. Adult ♂ Coll. Requa, California. E. Heller.
26. Adult ♂ P. Chilliwack, British Columbia, Canada. A. C. Brookes.
27. Adult ♂ P. Columbia Falls, Montana. A. C. Brookes.

c. *Teonoma cinerea columbiana* (Elliot).

Neotoma cinerea columbiana Elliot, Pub. Field Columb. Mus., I, 1899, p. 255. (Footnote.) Zoöl. Ser. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 165. Zoöl. Ser.

Teonoma cinerea columbiana Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 221. Zoöl. Ser.

British Columbia Bushy-tailed Wood Rat.

1. Adult—Type. Exch. Ducks, British Columbia, Canada. Am. Mus. Nat. Hist. N. Y. C. P. Streator.
2. Adult ♂ P. Midway, Kettle River, British Columbia, Canada. G. F. Dippie.

465. Teonoma acræa (Elliot).

Teonoma cinerea acræa Elliot, Pub. Field Columb. Mus., III, 1903, p. 247. Zoöl. Ser.

Teonoma acræa Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 221. Zoöl. Ser.

Mountain Bushy-tailed Wood Rat.

1–2. Adult ♀ Type and paratype. Coll. Hot Springs, Mt. Whitney, California. E. Heller.
3. Juv. ♂ Paratype. Coll. Hot Springs, Mt. Whitney, California. E. Heller.
4–6. Adult ♀ Coll. Big Cottonwood Lakes, Mt. Whitney, California. E. Heller.
7–8. Adult ♀ Coll. Inyo Mountains, summits E. of Lone Pine, California. E. Heller.

466. Teonoma fusca (True).

Neotoma occidentalis fusca True, Proc. U. S. Nat. Mus., 1894, p. 354.

Neotoma cinerea fusca Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 165. Zoöl. Ser.

Teonoma fusca Elliot, Pub. Field Columb. Mus., III, 1903, p. 187. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 222. Zoöl. Ser.

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FUSCOUS BUSHY-TAILED WOOD RAT.

1–7. Adult ♂ Coll. Florence, Oregon. E. Heller.
8–9. Adult ♀ Coll. Florence, Oregon. E. Heller.

a. Teonoma fusca apicalis (Elliot).

Neotoma fusca apicalis Elliot, Pub. Field Columb. Mus., III, 1903, p. 160. Zoöl. Ser.

Teonoma fusca apicalis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 222. Zoöl. Ser.

WHITE-TIPPED BUSHY-TAILED WOOD RAT.

1–5. Adult ♂ Type and paratypes. Coll. Gardiner, Coos County, Oregon. E. Heller.
6–8. Adult ♀ Paratypes. Coll. Gardiner, Coos County, Oregon. E. Heller.

467. Teonoma grangeri (Allen).

Neotoma grangeri Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1894, p. 324. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 165. Zoöl. Ser.

Teonoma grangeri Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 223. Zoöl. Ser.

GRANGER'S BUSHY-TAILED WOOD RAT.

1. Adult ♂ Exch. Hill City, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
2. Juv. ♀ Exch. Hill City, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

468. Teonoma oreolestes (Merriam).

Neotoma orolestes! Merr., Proc. Biol. Soc. Wash., IX, 1894, p. 128. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 166. Zoöl. Ser.

Teonoma oreolestes Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 223. Zoöl. Ser.

COLORADO BUSHY-TAILED WOOD RAT.

1–3. Adult ♂ P. Boulder, Colorado. R. T. Young.
4–7. Adult ♀ P. Boulder, Colorado. R. T. Young.
8. Adult ♀ P. Nederland, Colorado. R. T. Young.

469. Teonoma rupicola (Allen).

Neotoma rupicola Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1894, p. 323. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901; p. 166. Zoöl. Ser.

Teonoma rupicola Elliot, Check-L. Mamm. N. Amer. Cont. &. W. Indies, F. C. M. Pub., VI, 1905, p. 223. Zoöl. Ser.

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ROCK-DWELLING BUSHY-TAILED WOOD RAT.

1–2. Adult ♂ Exch. Corral Draw, Pine Ridge, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

3. Juv. ♀ Exch. Corral Draw, Pine Ridge, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

4. Adult ♂ Exch. Spring Creek, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

5. Adult ♀ Exch. Cheyenne River, Custer County, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

470. Teonoma cinnamomea (Allen).

Neotoma cinnamomea Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1895, p. 331. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 166. Zoöl. Ser.

Teonoma cinnamomea Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 223. Zoöl. Ser.

CINNAMON BUSHY-TAILED WOOD RAT.

1–3. Adult ♂ Paratypes. Exch. Bitter Creek, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

4. Adult ♀ Paratype. Exch. Bitter Creek, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

Genus 137. **Hodomys.**

Hodomys Merr., Proc. Acad. Nat. Scien. Phil., 1894, p. 232. Type *Neotoma alleni* Merriam.

471. Hodomys alleni (Merriam).

Neotoma alleni Merr., Proc. Biol. Soc. Wash., VII, 1892, p. 168.

Hodomys alleni Elliot, Mamm. Middle Amer. & W. Indies, F. C.

FIG. XXXIV. HODOMYS ALLENI. ALLEN'S WOOD RAT.

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M. Pub., IV, Pt. I, 1904, p. 297, figs. 50, XLIV. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 226. Zoöl. Ser.

ALLEN'S WOOD RAT.

1. Adult ♀ Exch. Valle de Banderas, Territorio de Tepic, Mexico. Am. Mus. Nat. Hist. N. Y. A. C. Buller.

Subfamily VI. **Microtinæ.**

Genus 138. **Phenacomys. Voles.**

Phenacomys Merr., N. Am. Faun., No. 2, 1889, p. 28. Type *Phenacomys intermedius* Merriam.

472. Phenacomys oreophilus Merriam.

Phenacomys orophilus! Merr., N. Am. Faun., No. 5, 1891, p. 65. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 168, fig. 36. Zoöl. Ser.

Phenacomys oreophilus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 226. Zoöl. Ser.

MOUNTAIN VOLE.

1. Adult ♂ P. Red Deer River, Alberta, Canada. G. F. Dippie.
2. Adult ♀ P. Pyramid Peak, Eldorado County, California. W. W. Price.

473. Phenacomys olympicus Elliot.

Phenacomys olympicus Elliot, Pub. Field Columb. Mus., I, 1899, p. 225. Zoöl. Ser. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 168. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 227. Zoöl. Ser.

Microtus pumilus Elliot, Pub. Field Columb. Mus., I, 1899, p. 226. Zoöl. Ser. Juv.

OLYMPIC MOUNTAINS VOLE.

1–4. Adult ♂ Type and paratypes. Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.

5. Adult ♀ Paratype. Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.

6. Adult ♀ Coll. Boulder Lake, Clallam County, Washington. D. G. Elliot.

7. Juv. ♂ Topotype. Coll. Happy Lake, Clallam County, Washington. Type of *M. pumilus*. D. G. Elliot.

8–9. Juv. ♀ Topotypes. Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.

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Genus 139. **Evotomys. Red-backed Voles.**

Evotomys Coues, Proc. Acad. Nat. Scien. Phil., 1874, p. 186. Type *Mus rutilus* Pallas.

474. Evotomys dawsoni Merriam.

Evotomys dawsoni Merr., Amer. Nat., XXII, 1888, p. 650. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 172. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 229. Zoöl. Ser.

DAWSON'S RED-BACKED VOLE.

1. Juv. ♂ P. Cariboo, British Columbia, Canada. C. K. Worthern.

475. Evotomys gapperi (Vigors).

Arvicola gapperi Vigors, Zoöl. Jour., V, 1830, p. 204, pl. IX.

Evotomys fuscodorsalis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1894, p. 103.

Evotomys gapperi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 172, fig. 37. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 230. Zoöl. Ser.

GAPPER'S RED-BACKED VOLE.

1. Adult ♂ Exch. South Twin Lake, Maine. Am. Mus. Nat. Hist. N. Y. J. Rowley.
2–4. Adult ♀ Exch. South Twin Lake, Maine. Am. Mus. Nat. Hist. N. Y. J. Rowley.
5–6. Adult ♀ Exch. Forks of Tobique River, New Brunswick. Am. Mus. Nat. Hist. N. Y. J. Rowley.
7. Adult — Exch. Andover, New Brunswick. Am. Mus. Nat. Hist. N. Y. J. Rowley.
8–12. Adult ♂ Exch. Trousers Lake, New Brunswick. Am. Mus. Nat. Hist. N. Y. J. Rowley.
13. Adult ♀ Exch. Trousers Lake, New Brunswick. Am. Mus. Nat. Hist. N. Y. J. Rowley.
14–17. Adult ♂ Coll. Dalhousie, New Brunswick. T. Surber.
18–19. Juv. ♂ Coll. Dalhousie, New Brunswick. T. Surber.
20. Adult ♀ Coll. Dalhousie, New Brunswick. T. Surber.
21. Juv. ♀ Coll. Dalhousie, New Brunswick. T. Surber.
22. Adult ♂ Coll. Restigouche River, New Brunswick. T. Surber.
23. Adult ♀ Coll. Restigouche River, New Brunswick. T. Surber.
24–25. Adult ♂ Coll. Metapedia, Province of Quebec, Canada. T. Surber.

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26–28. Adult ♂ Coll. Salmon Lake, Province of Quebec, Canada. T. Surber.
29–35. Adult ♂ Coll. Lake Edward, Province of Quebec, Canada. T. Surber.
36–39. Adult ♀ Coll. Lake Edward, Province of Quebec, Canada. T. Surber.
40–41. Adult ♂ P. Red Deer River, Alberta, Canada. G. F. Dippie.

a. Evotomys gapperi ochraceus Miller.

Evotomys gapperi ochraceus Miller, Proc. Bost. Soc. Nat. Hist., XXVI, 1894, p. 193. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 172. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 230. Zoöl. Ser.

OCHRACEOUS RED-BACKED VOLE.

1–2. Adult ♂ P. Kensington, Prince Edward Island, Canada. R. T. Young.
3. Adult ♀ P. Alberton, Prince Edward Island, Canada. R. T. Young.
4. Adult ♂ P. Alberton, Prince Edward Island, Canada. R. T. Young.

b. Evotomys gapperi galii (Merriam).

Evotomys galei Merr., N. Am. Faun., No. 4, 1890, p. 23, pl. II, fig. 3.

Evotomys gapperi galei Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 173. Zoöl. Ser.

Evotomys gapperi galii Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 231. Zoöl. Ser.

GALE'S RED-BACKED VOLE.

1. Adult ♂ P. Nederland, Colorado. R. T. Young.
2–3. Adult ♀ P. Nederland, Colorado. R. T. Young.

c. Evotomys gapperi saturatus Rhoads.

Evotomys gapperi saturatus Rhoads, Proc. Acad. Nat. Scien. Phil., 1894, p. 284. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 174. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 231. Zoöl. Ser.

RICH-COLORED RED-BACKED VOLE.

1. Adult ♂ P. Mount Baker Range, British Columbia, Canada. C. K. Worthern.
2. Adult ♀ P. Mount Baker Range, British Columbia, Canada. C. K. Worthern.

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476. Evotomys brevicaudus (Merriam).

Evotomys gapperi brevicaudus Merriam, N. Am. Faun., No. 5, 1891, p. 119, pl. III, figs. 7, 8.

Evotomys brevicaudus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 174. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 231. Zoöl. Ser.

SHORT-TAILED RED-BACKED VOLE.

1. Adult ♂ P. Park Siding, Michigan. C. Brandler.
2. Adult ♀ P. Park Siding, Michigan. C. Brandler.
3–5. Adult ♂ Topotypes. Exch. Custer, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

477. Evotomys carolinensis Merriam.

Evotomys carolinensis Merr., Am. Jour. Scien., 3d Ser., XXXVI, 1888, p. 460. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 174. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 231. Zoöl. Ser.

CAROLINA RED-BACKED VOLE.

1–7. Adult ♂ Coll. Black Mountain, West Virginia. T. Surber.
8–12. Adult ♀ Coll. Black Mountain, West Virginia. T. Surber.
13. Juv. ♂ Coll. Black Mountain, West Virginia. T. Surber.
14. Adult ♀ Coll. Job's Knob Mountain, West Virginia. T. Surber.

478. Evotomys obscurus Merriam.

Evotomys obscurus Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 72. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 176. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 232. Zoöl. Ser.

DUSKY RED-BACKED VOLE.

1. Adult ♂ Coll. Grant's Pass, Oregon. E. Heller.

479. Evotomys nivarius Bailey.

Evotomys nivarius Bailey, Proc. Biol. Soc. Wash., XI, 1897, p. 136. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 177. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 233. Zoöl. Ser.

SNOW-LOVING RED-BACKED VOLE.

1–8. Adult ♂ Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.
9–18. Adult ♀ Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.
19. Adult ♂ Coll. Boulder Lake, Clallam County, Washington. D. G. Elliot.

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20–22. Adult ♀ Coll. Boulder Lake, Clallam County, Washington. D. G. Elliot.

Genus 140. **Microtus. Meadow Voles.**

Microtus Schrank, Fauna Boica, I, 1ste Abth., 1798, pp. 66, 72. Type *Mus arvalis* Pallas.

Arvicola Lacép., Tab. Div. Sous-div. Ord. et Gen. Mamm., 1799, p. 10.

Mynomes Rafin., Am. Month. Mag., II, 1817, p. 45.

Psammomys Le Conte, Ann. N. Y. Lyc. Nat. Hist., 1830, p. 132. (nec Cretzschmar.)

Pitymys McMurt., Cuv. Anim. Kingd., Am. ed., I, Append., 1831, p. 434. (Footnote.)

Ammomys Bon., Sagg. Dist. Met. degli. Anim. Vert., 1831, p. 20. (Footnote.)

Pinemys Less., Hist. Nat. Mamm, et Ois. découv. depuis 1788, Ouvres de Buffon, V, 1836, p. 436.

Hemiotomys Sélys Longchamps, Essai Mon. Campan. Envir. Liége, 1836, p. 7, pl. I.

Lagurus Glog., Hand-u. Hilfsb. Naturg., 1841, p. 97.

Neodon Hodgs., Ann. Mag. Nat. Hist., 2d Ser., III, 1849, p. 203.

Paludicola Blas., Naturgesch. Säugeth. Deutsch., 1857, pp. 333–334, 343–368, figs. 183–201.

Agricola Blas., Naturgesch. Säugeth. Deutsch., 1857, pp. 334–335; figs. 202–206.

Chilotus Baird, N. Am. Mamm., 1857, p. 516.

Pedomys Baird, N. Am. Mamm., 1857, p. 517.

Praticola Fatio, Les Campagn. Bass. Léman, Ass. Zool. Léman, 1867, pp. 36, 63, 75, pl. I, figs. 5–17, pls. III–V. (Part.)

Sylvicola Fatio, Les Campagn. Bass. Léman, Ass. Zool. Léman, 1867, pp. 63–72, pl. I, figs. 18-25, pl. VI.

Terricola Fatio, Les Campagn. Bass. Léman, Ass. Zool. Léman, 1867, pp. 73, 75.

Ochetomys Fitzin., Sitzungsb. K. Akad. Wiss. Wien., LVI, 1867, pp. 103–105.

Micrurus Forsyth-Major, Att. dell. Soc. Tosc. Scien. Nat. Pisa, III, 1877, p. 126.

Eremiomys Polyakoff, Mém. Acad. Imp. Scien. St. Pétersb., XXXIX, Suppl., 1881, pp. 35, 38, figs. 1–2.

Neofiber True, Science, IV, 1884, p. 34.

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Campicola Schulze, Schrift. Natur. Ver. Harz. Wernig., v, 1890, pp. 24–25.
Tetramerodon Rhoads, Proc. Acad. Nat. Scien. Phil., 1894, p. 282.
Aulacomys Rhoads, Amer. Nat., xxviii, 1894, p. 182, figs. 1–5.
Orthriomys Merr., Proc. Biol. Soc. Wash., xii, 1898, p. 106.
Herpetomys Merr., Proc. Biol. Soc. Wash., xii, 1898, p. 107.

Subgenus A. **Microtus.**

480. Microtus pennsylvanicus (Ord).
Mus pennsylvanica Ord, Guth. Geog., 2d Am. ed., ii., 1815, p. 292.
Mynomes pratensis Rafin., Amer. Month. Mag., ii, 1817, p. 45.
Lemmus noveboracensis Rafin., Ann. Nat., 1820, p. 3.
Arvicola palustris Harl., Faun. Amer., 1825, pp. 136–138.
Arvicola riparius Ord, Jour. Acad. Nat. Scien. Phil., iv, Pt. ii, 1825, pp. 305–306.
Arvicola hirsutus Emmons, Rept. Quad. Mass., 1840, p. 60.
Arvicola alborufescens Emmons, Rept. Quad. Mass., 1840, pp. 60–61.
Arvicola fulva Aud. & Bachm., Proc. Acad. Nat. Scien. Phil., 1841, p. 96.
Arvicola nasuta Aud. & Bachm., Proc. Acad. Nat. Scien. Phil., 1841, pp. 96–97.
Arvicola rufescens De Kay, Nat. Hist. N. Y., Zoöl., i, 1842, p. 85.
Arvicola oneida De Kay, Nat. Hist. N. Y., Zoöl., i, 1842, pp. 88–89.
Arvicola dekayi Aud. & Bachm., Quad. N. Amer., iii, 1854, pp. 287–288.
Arvicola riparia var. *longipilis* Baird, N. Am. Mamm., 1857, p. 524.
Arvicola rufidorsum Baird, N. Am. Mamm., 1857, p. 526.
Microtus pennsylvanicus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., ii, 1901, p. 179, fig. 38. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., vi, 1905, p. 234. Zoöl. Ser.

Pennsylvania Meadow Vole.

1. Adult ♂ Exch. Pico, Vermont. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
2. Juv. ♂ Exch. Pico, Vermont. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
3. Adult ♂ Exch. Hartland, Vermont. Am. Mus. Nat. Hist. N. Y. C. L. Brownell.

4–6. Adult ♂ Exch. Nyack, New York. Am. Mus. Nat. Hist. N. Y. C. L. Brownell.

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7. Adult ♀ Exch. Nyack, New York. Am. Mus. Nat. Hist. N. Y. C. L. Brownell.
8–9. Adult ♂ Exch. Hastings, New York. Am. Mus. Nat. Hist. N. Y. J. Rowley.
10–11. Adult ♀ Exch. Hastings, New York. Am. Mus. Nat. Hist. N. Y. J. Rowley.
12–13. Adult ♀ Exch. Suffolk County, New York. Am. Mus. Nat. Hist. N. Y. A. H. Helme.
14. Adult ♂ Exch. Highland, New York. Am. Mus. Nat. Hist. N. Y. A. H. Helme.
15. Adult ♂ Exch. Granton, Hackensack Meadows, New Jersey. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
16. Adult ♀ Exch. Nordhoff, New Jersey. Am. Mus. Nat. Hist. N. Y.
17–21. Adult ♂ Pres. White Sulphur Springs, West Virginia. T. Surber.
22–27. Adult ♀ Pres. White Sulphur Springs, West Virginia. T. Surber.
28. Juv. ♀ Pres. White Sulphur Springs, West Virginia. T. Surber.
29–32. Adult ♀ Pres. Jackson Park, Chicago, Illinois. L. Kenkel.
33–35. Adult ♂ Pres. Jackson Park, Chicago, Illinois. F. E. Lutz.
36. Adult ♀ Pres. Jackson Park, Chicago, Illinois. F. E. Lutz.
37–38. Adult ♂ Exch. Weaverville, North Carolina. Am. Mus. Nat. Hist. N. Y. J. S. Cairns.
39–40. Adult ♂ Exch. Perch, Nebraska. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
41. Adult ♀ Exch. Perch, Nebraska. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
42–43. Adult ♂ P. Knoxville, Iowa. G. K. Cherrie.
44. Adult ♂ Exch. Forks of the Tobique River, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. J. Rowley.
45–49. Adult ♀ Exch. Forks of the Tobique River, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. J. Rowley.
50–54. Adult ♂ Coll. Dalhousie, New Brunswick, Canada. T. Surber.
55–57. Adult ♀ Coll. Dalhousie, New Brunswick, Canada. T. Surber.
58. Adult ♂ Coll. Restigouche River, New Brunswick, Canada. T. Surber.

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59. Adult ♀ Coll. Restigouche River, New Brunswick, Canada. T. Surber.
60–62. Adult ♂ Coll. Murray Bay, Province of Quebec, Canada. T. Surber.
63. Adult ♀ Coll. Murray Bay, Province of Quebec, Canada. T. Surber.
64. Adult ♂ P. Lake Edward, Prince Edward Island, Canada. R. T. Young
65. Adult ♂ Pres. Beaver Dam, Wisconsin. W. E. Snyder.

a. Microtus pennsylvanicus acadicus Bangs.

Microtus pennsylvanicus acadicus Bangs, Amer. Nat., XXXI, 1897, p. 239. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 180. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 235. Zoöl. Ser.

ACADIAN VOLE.

1–2. Adult ♀ P. Mount Stewart, Prince Edward Island, Canada. R. T. Young.
3. Adult ♂ P. Georget, Prince Edward Island, Canada. R. T. Young.
4–12. Adult ♂ P. Allerton, Prince Edward Island, Canada. R. T. Young.
13–17. Adult ♀ P. Allerton, Prince Edward Island, Canada. R. T. Young.

b. Microtus pennsylvanicus modestus (Baird).

Arvicola modesta Baird, N. Am. Mamm., 1857, p. 535.

Arvicola insperatus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1894, p. 347.

Microtus pennsylvanicus modestus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 180. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905 p. 236. Zoöl. Ser.

SAWATCH MEADOW VOLE.

1–81. Adult ♂ P. Boulder, Colorado. R. T. Young.
82–127. Adult ♀ P. Boulder, Colorado. R. T. Young.

c. Microtus pennsylvanicus fontigenus (Bangs).

Microtus fontigenus Bangs, Proc. Biol. Soc. Wash., X, 1896, p. 48.

Microtus pennsylvanicus fontigenus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 181. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 236. Zoöl. Ser.

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FOREST VOLE.

1–2. Adult ♂ Topotypes. Coll. Lake Edward, Province of Quebec, Canada. T. Surber.

3. Adult ♀ Topotype. Coll. Lake Edward, Province of Quebec, Canada. T. Surber.

481. Microtus drummondi (Audubon & Bachman).

Arvicola drummondii Aud. & Bachm., Quad. N. Am., III, 1854, p. 166.

Arvicola (Mynomes) microcephalus Rhoads, Proc. Acad. Nat. Scien. Phil., 1894, p. 286.

Microtus stonei Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1899, p. 5.

Microtus drummondi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 181. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 236. Zoöl. Ser.

DRUMMOND'S MEADOW VOLE.

1–7. Adult ♂ P. Blindman River, Alberta, Canada. G. F. Dippie.

8–10. Adult ♀ P. Blindman River, Alberta, Canada. G. F. Dippie.

11. Adult ♂ P. Red Deer River, Alberta, Canada. G. F. Dippie.

12. Adult ♂ Coll. Jamestown, North Dakota. W. E. Snyder.

13. Adult ♂ Coll. Bottineau, North Dakota. W. E. Snyder.

14–15. Adult ♀ Coll. Bottineau, North Dakota. W. E. Snyder.

16. Adult ♀ Coll. Oakes, North Dakota. W. E. Snyder.

17. Adult ♂ Coll. Steele, North Dakota. W. E. Snyder.

482. Microtus terrænovæ (Bangs).

Arvicola terrænovæ Bangs, Proc. Biol. Soc. Wash., IX, 1894, p. 129.

Microtus terrænovæ Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 182. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 238. Zoöl. Ser.

NEWFOUNDLAND MEADOW VOLE.

1–2. Adult ♂ Topotypes. Exch. Cordroy, Newfoundland. Am. Mus. Nat. Hist. N. Y.

483. Microtus nanus (Merriam).

Arvicola nanus Merr., N. Am. Faun., No. 5, 1891, p. 62, pl. II, figs. 5, 6.

Microtus nanus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 184. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 239. Zoöl. Ser.

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DWARF MEADOW VOLE.

1–16. Adult ♂ P. Nederland, Colorado. R. T. Young.
17–30. Adult ♀ P. Nederland, Colorado. R. T. Young.
31–32. Adult ♂ P. Eldora, Colorado. R. T. Young.
33–35. Adult ♀ P. Eldora, Colorado. R. T. Young.

a. Microtus nanus canescens Bailey.

Microtus nanus canescens Bailey, Proc. Biol. Soc. Wash., XII, 1898, p. 87. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 185. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 239. Zoöl. Ser.

GRAY MEADOW VOLE.

1. Adult ♂ P. Cariboo, British Columbia, Canada. C. K. Worthern.

484. Microtus canicaudus Miller.

Microtus canicaudus Miller, Proc. Biol. Soc. Wash., XI, 1897, p. 67. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 185. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 239. Zoöl. Ser.

GRAY-TAILED MEADOW VOLE.

1–6. Adult ♂ Topotypes. Coll. McCoy, Polk County, Oregon. E. Heller.
7. Adult ♀ Coll. Beaverton, Oregon. E. Heller.

485. Microtus dutcheri Bailey.

Microtus dutcheri Bailey, Proc. Biol. Soc. Wash., XII, 1898, p. 85. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 185. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 239. Zoöl. Ser.

DUTCHER'S MEADOW VOLE.

1–3. Adult ♂ Coll. Whitney Creek, Mt. Whitney, California. E. Heller.
4. Juv. ♂ Coll. Whitney Creek, Mt. Whitney, California. E. Heller.
5–16. Adult ♀ Coll. Whitney Creek, Mt. Whitney, California. E. Heller.
17–20. Adult ♂ Coll. Whitney Meadows, Mt. Whitney, California. E. Heller
21–28. Adult ♀ Coll. Whitney Meadows, Mt. Whitney, California. E. Heller.
29–31. Adult ♂ Topotypes. Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.
32–35. Adult ♀ Topotypes. Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.

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36–41. Adult ♂ Coll. Hot Springs, Mt. Whitney, California. E. Heller.

42. Adult ♀ Coll. Hot Springs, Mt. Whitney, California. E. Heller.

43. Adult ♂ Coll. Big Cottonwood Lakes, Mt. Whitney, California. E. Heller.

44. Adult ♀ Coll. Big Cottonwood Lakes, Mt. Whitney, California. E. Heller.

45. Juv. ♂ Coll. Big Cottonwood Lakes, Mt. Whitney, California. E. Heller.

485. Microtus californicus (Peale).

Arvicola californica Peale, U. S. Expl. Exped., Mamm. & Ornith., VIII, 1848, p. 46.

Arvicola trowbridgi Baird, N. Am. Mamm., 1857, p. 529.

Microtus californicus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 186. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 240. Zoöl. Ser.

CALIFORNIA MEADOW VOLE.

1–16. Adult ♂ Coll. Nicasio, California. E. Heller.

17–22. Adult ♀ Coll. Nicasio, California. E. Heller.

23–28. Adult ♂ Coll. Petaluma, California. E. Heller.

29–33. Adult ♀ Coll. Petaluma, California. E. Heller.

34–37. Adult ♂ Coll. Point Reyes, California. E. Heller.

38–39. Adult ♀ Coll. Point Reyes, California. E. Heller.

40. Adult ♂ Coll. Los Angeles, California. E. Heller.

41–42. Adult ♀ Coll. Los Angeles, California. E. Heller.

43–44. Adult ♂ Coll. Fort Tejon, California. E. Heller.

45–47. Adult ♀ Coll. Fort Tejon, California. E. Heller.

48–51. Adult ♂ Coll. Piru Creek, California. E. Heller.

52–56. Adult ♀ Coll. Piru Creek, California. E. Heller.

57–59. Adult ♂ Coll. Oro Grande, California. E. Heller.

60–61. Adult ♀ Coll. Oro Grande, California. E. Heller.

a. Microtus californicus hyperythrus Elliot.

Microtus californicus hyperythrus Elliot, Pub. Field Columb. Mus., III, 1903, p. 161. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 302, figs. 51, XLV. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 240. Zoöl. Ser.

REDDISH MEADOW VOLE.

1. Adult ♂ Type.* Coll. La Grulla, San Pedro Martir Mountains, Lower California, Mexico. E. Heller.

*By some quite inexplicable inadvertence, the type locality for this species has been given as San Quentin, when it should have been "La Grulla."

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FIG. XXXV. MICROTUS C. HYPERYTHRUS.
REDDISH MEADOW VOLE.

2–7. Adult ♀ Paratypes. Coll. La Grulla, San Pedro Martir Mountains, Lower California, Mexico. E. Heller.
8–10. Adult ♂ Coll. Aguaje de las Fresas, San Pedro Martir Mountains, Lower California, Mexico. E. Heller.
11–14. Adult ♀ Coll. Aguaje de las Fresas, San Pedro Martir Mountains, Lower California, Mexico. E. Heller.
15. Adult ♂ Coll. Vallecitos, San Pedro Martir Mountains, Lower California, Mexico. E. Heller.
16–17. Adult ♀ Coll. Vallecitos, San Pedro Martir Mountains, Lower California, Mexico. E. Heller.
18. Adult ♂ Coll. San Antonio, San Pedro Martir Mountains, Lower California, Mexico. E. Heller.
19. Adult ♀ Coll. San Antonio, San Pedro Martir Mountains, Lower California, Mexico. E. Heller.
20–25. Adult ♂ Coll. San Quentin, San Pedro Martir Mountains, Lower California, Mexico. E. Heller.
26–31. Adult ♀ Coll. San Quentin, San Pedro Martir Mountains, Lower California, Mexico. E. Heller.

b. Microtus californicus vallicola Bailey.

Microtus californicus vallicola Bailey, Proc. Biol. Soc. Wash., XII, 1898, p. 89. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 186. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 240. Zoöl. Ser.

VALLEY MEADOW VOLE.

1–13. Adult ♂ Topotypes. Coll. Lone Pine, Inyo County, California. E. Heller.
14. Juv. ♂ Topotype. Coll. Lone Pine, Inyo County, California. E. Heller.
15–25. Adult ♀ Topotypes. Coll. Lone Pine, Inyo County, California. E. Heller.

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c. *Microtus californicus constrictus* Bailey.

Microtus californicus constrictus Bailey, N. Am. Faun., No. 17, 1900, p. 36. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 186. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 241. Zoöl. Ser.

COAST MEADOW VOLE.

1–6. Adult ♂ Coll. Mendocino, California. E. Heller.
7–9. Adult ♀ Coll. Mendocino, California. E. Heller.
10–20. Adult ♂ Coll. Eureka, California. E. Heller.
21–25. Adult ♀ Coll. Eureka, California. E. Heller.

487. Microtus edax (Le Conte).

Arvicola edax Le Conte, Proc. Acad. Nat. Scien. Phil., 1853, p. 405.

Microtus edax Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 187. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 241. Zoöl. Ser.

TULE MEADOW VOLE.

1–9. Adult ♂ P. Portola, San Mateo County, California. W. W. Price.
10–29. Adult ♀ P. Portola, San Mateo County, California. W. W. Price.
30. Juv. ♂ P. Portola, San Mateo County, California. W. W. Price.
31–33. Juv. ♀ P. Portola, San Mateo County, California. W. W. Price.
34. Adult ♂ Pres. Palo Alto, California. E. Heller.
35–37. Adult ♀ Pres. Palo Alto, California. E. Heller.
38–42. Adult ♂ P. Alum Rock Park, Santa Clara County, California. W. W. Price.
43–55. Adult ♀ P. Alum Rock Park, Santa Clara County, California. W. W. Price.
56–57. Adult ♂ P. Mt. Hamilton, Santa Clara County, California. W. W. Price.
58–60. Adult ♂ P. Carmel River, Monterey County, California. W. W. Price.
61. Adult ♂ P. Big Trees, Calaveras County, California. W. W. Price.
62. Adult ♂ P. San Antonio, San Bernardino County, California. W. W. Price.
63. Adult ♀ P. Snow Mountains, Santa Clara County, California. W. W. Price.
64. Adult ♂ P. Stanford University, California. W. W. Price.
65. Juv. ♂ P. Stanford University, California. W. W. Price.

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66–67. Adult ♀ P. Stanford University, California. W. W. Price.

488. Microtus yakutatensis Merriam.

Microtus yakutatensis Merr., Proc. Wash. Acad. Scien., II, 1900, p. 22. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 188. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 242. Zoöl. Ser.

YAKUTAT MEADOW VOLE.

1. Juv. ♂ Topotype. Coll. Yakutat Bay, Alaska. D. G. Elliot.

489. Microtus kadiacensis Merriam.

Microtus kadiacensis Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 222. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 188. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 242. Zoöl. Ser.

KADIAK MEADOW VOLE.

1. Adult ♂ Coll. Kadiak, Kadiak Island, Alaska. D. G. Elliot.
2. Juv. ♀ Coll. Kadiak, Kadiak Island, Alaska. D. G. Elliot.

a. Microtus unalascensis popofensis Merriam.

Microtus unalascensis popofensis Merr., Proc. Wash. Acad. Scien., II, 1900, p. 22. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 188. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 242. Zoöl. Ser.

POPOF ISLAND MEADOW VOLE.

1–4. Adult — Topotypes. Coll. Popof Island, Shumagin Islands, Alaska. D. G. Elliot.

5. Juv. — Topotype. Coll. Popof Island, Shumagin Islands, Alaska. D. G. Elliot.

490. Microtus abbreviatus Miller.

Microtus abbreviatus Miller, Proc. Biol. Soc. Wash., XIII, 1899, p. 13. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 189. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 243. Zoöl. Ser.

HALL ISLAND MEADOW VOLE.

1. Adult ♂ Topotype. Coll. Hall Island, Bering Sea, Alaska. D. G. Elliot.
2. Adult ♀ Topotype. Coll. Hall Island, Bering Sea, Alaska. D. G. Elliot.

491. Microtus townsendi (Bachman).

Arvicola townsendii Bachm., Jour. Acad. Nat. Scien. Phil., 1839, p. 60, pl. I.

Arvicola occidentalis Peale, U. S. Expl. Exped., Mamm. & Ornith., VIII, 1848, p. 45.

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Microtus townsendi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 190. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 243. Zoöl. Ser.

TOWNSEND'S MEADOW VOLE.

1–8. Adult ♂ Coll. Eureka, California. E. Heller.
9–12. Adult ♀ Coll. Eureka, California. E. Heller.
13. Adult ♂ Coll. Scottsburg, Oregon. E. Heller.
14–20. Adult ♂ Coll. Marshfield, Oregon. E. Heller.
21–22. Adult ♂ Coll. Florence, Oregon. E. Heller.
23. Adult ♂ Coll. Gardiner, Oregon. E. Heller.
24–25. Adult ♀ Coll. Gardiner, Oregon. E. Heller.
26–27. Adult ♂ Coll. McCoy, Oregon. E. Heller.
28–29. Adult ♀ Coll. McCoy, Oregon. E. Heller.

492. Microtus longicaudus (Merriam).

Arvicola (*Mynomes*) *longicaudus!* Merr., Amer. Nat., XXII, 1888, p. 934.

Microtus longicaudus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 191. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 243. Zoöl. Ser.

LONG-TAILED MEADOW VOLE.

1. Adult ♂ P. Yanceys, Yellowstone Nat. Park. E. S. Thompson.

493. Microtus mordax (Merriam).

Arvicola (*Mynomes*) *mordax* Merr., N. Am. Faun., No. 5, 1891, p. 61.

Microtus vellerosus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1899, p. 7.

Microtus cautus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1899, p. 7.

Microtus mordax Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 191. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 244. Zoöl. Ser.

CANTANKEROUS MEADOW VOLE.

1–13. Adult ♂ P. Silver Lake, Amador County, California. W. W. Price.
14–28. Adult ♀ P. Silver Lake, Amador County, California. W. W. Price.
29–33. Juv. ♀ P. Silver Lake, Amador County, California. W. W. Price.
34–38. Adult ♂ P. Hermit Valley, Calaveras County, California. W. W. Price.

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39–45. Adult ♀ P. Hermit Valley, Calaveras County, California. W. W. Price.
46–47. Juv. ♀ P. Hermit Valley, Calaveras County, California. W. W. Price.
48. Adult ♂ P. Edgewood, Douglas County, Nevada. W. W. Price.
49. Adult ♀ P. Canadian National Park, Alberta, Canada. G. F. Dippie.
50–51. Adult ♂ P. Pyramid Peak, Eldorado County, California. W. W. Price.
52–53. Adult ♀ P. Pyramid Peak, Eldorado County, California. W. W. Price.
54. Adult ♂ P. Blue Lake, Alpine County, California. W. W. Price.
55. Adult ♀ P. Blue Lake, Alpine County, California. W. W. Price.
56. Adult ♀ P. Echo, Eldorado County, California. W. W. Price.
57. Adult ♂ Coll. Whitney Creek, Mt. Whitney, California. E. Heller.

494. Microtus macrurus Merriam.

Microtus macrurus Merr., Proc. Acad. Nat. Scien. Phil., 1898, p. 353. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 191. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 244. Zoöl. Ser.

OLYMPIC MEADOW VOLE.

1–7. Adult ♂ Coll. Johnson's Ranch, Elwah River, Clallam County, Washington. D. G. Elliot.
8. Adult ♂ Coll. Boulder Creek, Clallam County, Washington. D. G. Elliot.

495. Microtus angusticeps Bailey.

Microtus angusticeps Bailey, Proc. Biol. Soc. Wash., XII, 1898, p. 86. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 192. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 244. Zoöl. Ser.

COAST MEADOW VOLE.

1–8. Adult ♂ Topotypes. Coll. Crescent City, California. E. Heller.
9–12. Adult ♀ Topotypes. Coll. Crescent City, California. E. Heller.
13–17. Adult ♂ Coll. Requa, California. E. Heller.
18–20. Adult ♀ Coll. Requa, California. E. Heller.

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21–31. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
32–40. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.

496. Microtus alticola (Merriam).

Arvicola (*Mynomes*) *alticolus!* Merr., N. Am. Faun., No. 3, 1890, p. 67, pl. v, figs. 1, 2, and pl. vi, figs. 1–4.

Microtus alticola Elliot, Syn. N. Am. Mamm., F. C. M. Pub., ii, 1901, p. 192. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., vi, 1905, p. 244. Zoöl. Ser.

MOUNTAIN MEADOW VOLE.

1. Juv. ♂ P. White Mountains, Arizona. W. W. Price.
2. Adult ♀ P. White Mountains, Arizona. W. W. Price.
3. Adult ♂ P. Florida, La Plata County, Colorado. C. P. Rowley.

a. Microtus alticola leucophæus (Allen).

Arvicola leucophæus! Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1894, p. 320.

Microtus alticola leucophæus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., ii, 1901, p. 192. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., vi, 1905, p. 245. Zoöl. Ser.

GRAHAM MOUNTAIN MEADOW VOLE.

1–2. Adult ♀ Paratypes. P. Graham Mountains, Arizona. W. W. Price.

497. Microtus mexicanus (Saussure).

Arvicola (*Hemiotomys*) *mexicanus* Sauss., Rev. Mag. Zool., 2me Sér., xiii, 1861, p. 3.

Microtus mexicanus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., iv, Pt. 1, 1904, p. 301. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., vi, 1905, p. 245. Zoöl. Ser.

MEXICAN MEADOW VOLE.

1–6. Adult ♂ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber.
7–12. Adult ♀ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber.
13. Juv. ♂ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber.
14. Adult ♂ Coll. Mount Orizaba, State of Vera Cruz, Mexico. Heller & Barber.
15–17. Adult ♀ Coll. Mount Orizaba, State of Vera Cruz, Mexico. Heller & Barber.

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a. Microtus mexicanus phæus (Merriam).

Arvicola phæus! Merr., Proc. Biol. Soc. Wash., VII, 1892, p. 171.

Microtus mexicanus phæus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 302. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 245. Zoöl. Ser.

COLIMA OR DARK MEADOW VOLE.

1–2. Adult ♂ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

3. Adult ♀ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

498. Microtus mogollonensis (Mearns).

Arvicola mogollonensis Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 283.

Microtus mogollonensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 192. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 246. Zoöl. Ser.

MOGOLLON MOUNTAINS MEADOW VOLE.

1. Adult ♂ Exch. Bradshaw City, Arizona. Am. Mus. Nat. Hist. N. Y.

Subgenus B. **Lagurus.**

499. Microtus curtatus (Cope).

Arvicola curtata Cope, Proc. Acad. Nat. Scien. Phil., 1868, p. 2.

Arvicola (*Pedomys*) *austerus curtatus* Coues, Mon. N. Am. Rodent., 1877, p. 215.

Microtus curtatus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 195, fig. 39. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 247. Zoöl. Ser.

SHORT-TAILED MEADOW VOLE.

1–2. Juv. ♀ P. Mount Siegel, Douglas County, Nevada. W. W. Price.

Subgenus C. **Pedomys.**

500. Microtus austerus (Le Conte).

? *Hypudæus ochrogaster* Wagn., Schreb. Säugth., Suppl., III, 1843, p. 592.

Arvicola austerus Le Conte, Proc. Acad. Nat. Scien. Phil., 1853, p. 405.

Arvicola cinnamomea Baird, N. Am. Mamm., 1857, p. 541.

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Microtus austerus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 196, fig. 40. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 248. Zoöl. Ser.

PRAIRIE MEADOW VOLE.

1–6. Adult ♂ Coll. Alva, Oklahoma Territory. T. Surber.
7–13. Adult ♀ Coll. Alva, Oklahoma Territory. T. Surber.
14–15. Adult ♂ P. Knoxville, Iowa. G. K. Cherrie.
16. Adult — P. Knoxville, Iowa. G. K. Cherrie.
17. Adult ♂ Exch. Lawrence, Kansas. Am. Mus. Nat. Hist. N. Y. L. L. Dyche.
18–20. Juv. ♂ P. Lawrence, Kansas. J. Rowley.
21. Juv. ♀ P. Lawrence, Kansas. J. Rowley.
22. Adult ♂ Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
23. Adult ♀ Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
24. Juv. ♂ Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

501. Microtus minor (Merriam).

Arvicola austerus! minor Merr., Amer. Nat., XXII, 1888, p. 598.

Microtus minor Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 197. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 248. Zoöl. Ser.

LEAST UPLAND MEADOW VOLE.

1–5. Adult ♂ P. Red Deer River, Alberta, Canada. G. F. Dippie.
6. Adult ♀ P. Red Deer River, Alberta, Canada. G. F. Dippie.
7–9. Juv. — P. Red Deer River, Alberta, Canada. G. F. Dippie.
10. Adult ♂ Coll. Minot, North Dakota. W. E. Snyder.
11. Adult ♀ Coll. Minot, North Dakota. W. E. Snyder.
12. Adult ♂ Coll. Jamestown, North Dakota. W. E. Snyder.
13. Adult ♀ Coll. Jamestown, North Dakota. W. E. Snyder.
14. Adult ♀ Coll. Minnewaukon, North Dakota. W. E. Snyder.

Subgenus D. **Pitymys.**

502. Microtus pinetorum (Le Conte).

Psammomys pinetorum Le Conte, Ann. N. Y. Lyc. Nat. Hist., III, 1830, p. 133, pl. II.

Microtus pinetorum Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 198, fig. 41. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 249. Zoöl. Ser.

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PINE MEADOW VOLE.

1. Adult ♂ Exch. Suffolk County, New York. Am. Mus. Nat. Hist. N. Y. A. H. Helme.
2–4. Adult ♂ Exch. Weaverville, North Carolina. Am. Mus. Nat. Hist. N. Y. J. S. Cairns.
5. Adult ♀ Exch. Weaverville, North Carolina. Am. Mus. Nat. Hist. N. Y. J. S. Cairns.
6–10. Adult ♂ Coll. White Sulphur Springs, West Virginia. T. Surber.
11–12. Adult ♀ Coll. White Sulphur Springs, West Virginia. T. Surber.
13–14. Adult ♀ Coll. Apex, North Carolina. T. Surber.
15. Adult ♀ Coll. Catawba, South Carolina. T. Surber.

503. Microtus nemoralis (Bailey).

Microtus pinetorum nemoralis Bailey, Proc. Biol. Soc. Wash., XII, 1898, p. 89.

Microtus nemoralis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 199. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 249. Zoöl. Ser.

WOODLAND MEADOW VOLE.

1–2. Adult ♀ Coll. Dougherty, Indian Territory. T. Surber.
3. Adult ♀ Coll. Noble, Oklahoma Territory. T. Surber.

504. Microtus quasiater (Coues).

Arvicola (Pitymys) pinetorum quasiater Coues, Proc. Acad. Nat. Scien. Phil., 1874, p. 191.

Microtus quasiater Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 303, fig. 52. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 249. Zoöl. Ser.

JALAPA MEADOW VOLE.

1–6. Adult ♂ Coll. Xico, State of Vera Cruz, Mexico. N. G. Buxton.
7–12. Adult ♀ Coll. Xico, State of Vera Cruz, Mexico. N. G. Buxton.
13–14. Adult ♀ Exch. Jalapa, State of Vera Cruz, Mexico. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

Subgenus E. Chilotus.

505. Microtus oregoni (Bachman).

Arvicola oregoni Bachm., Jour. Acad. Nat. Scien. Phil., 1839, p. 60, pl. I.

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Microtus oregoni Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 200, fig. 42. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 250. Zoöl. Ser.

OREGON MEADOW VOLE.

1–6. Adult ♂ Coll. Eureka, California. E. Heller.
7–10. Adult ♀ Coll. Eureka, California. E. Heller.
11. Adult ♂ Coll. Mendocino, California. E. Heller.
12–13. Adult ♀ Coll. Requa, California. E. Heller.
14–17. Adult ♂ Coll. Beavertown, Oregon. E. Heller.
18–21. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
22. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.
23–25. Adult ♂ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.
26–33. Adult ♀ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.
34–37. Adult ♂ Coll. Johnson's Ranch, Elwah River, Clallam County, Washington. D. G. Elliot.

506. Microtus serpens Merriam.

Microtus serpens Merr., Proc. Biol. Soc. Wash., 1897, p. 75. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 200. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 250. Zoöl. Ser.

CREEPING MEADOW VOLE.

1–2. Adult ♂ Exch. Sumas, British Columbia, Canada. U. S. Nat. Mus. C. K. Worthern.

Subgenus F. **Arvicola.**

507. Microtus schermaus F. Cuvier.

Microtus schermaus F. Cuv., Dict. Scien. Natur., VI, 1817, p. 281.

SCHERMAUS VOLE.

1–5. Adult ♂ P. Meiringen, Switzerland. J. A. Loring.
6–9. Adult ♀ P. Meiringen, Switzerland. J. A. Loring.

a. Microtus richardsoni arvicoloides (Rhoads).

Aulacomys arvicoloides Rhoads, Amer. Nat., XXVIII, 1894, p. 182.
Microtus principalis Rhoads, Amer. Nat., XXIX, 1895, p. 940.
Microtus richardsoni arvicoloides Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 202. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 251. Zoöl. Ser.

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CASCADE WATER VOLE.

1–2. Adult ♂ P. Mt. Baker Range, British Columbia, Canada. C. K. Worthern.

Subgenus G. **Neofiber.**

508. Microtus alleni (True).

Neofiber alleni True, Science, IV, 1884, p. 34.

Microtus alleni Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 203, fig. 44. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 252. Zoöl. Ser.

FLORIDA WATER VOLE.

1–5. Adult ♂ Coll. Gainesville, Florida. T. Surber.
6–10. Adult ♀ Coll. Gainesville, Florida. T. Surber.
11–12. Juv. ♂ Coll. Gainesville, Florida. T. Surber.
13. Juv. ♀ Coll. Gainesville, Florida. T. Surber.
14–16. Adult ♂ Coll. Enterprise, Florida. T. Surber.
17–19. Adult ♀ Coll. Enterprise, Florida. T. Surber.
20–22. Juv. ♀ Coll. Enterprise, Florida. T. Surber.
23. Juv. ♂ Coll. Enterprise, Florida. T. Surber.
24. Adult — Exch. East Micco, Florida. Am. Mus. Nat. Hist. N. Y. C. S. Allen.

Genus 141. **Fiber. Musk Rats.**

Fiber F. Cuv., Leçons d'Anat. Comp., I, 1800, tab. I. Type *Castor zibethicus* Linnæus.

Ondatra Lacép., Tabl. Div. Sous-div. Ord. et Gen. Mamm., 1799, p. 9. (nec Link.)

Moschomys Billb., Syn. Faun. Scandinav., Mamm., I, 1828, Conspectus A.

509. Fiber zibethicus (Linnæus).

Castor zibethicus Linn., Syst. Nat., I, 1766, p. 79.

Fiber osoyoosensis Lord, Proc. Zoöl. Soc., 1863, p. 97.

Fiber zibethicus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 212, fig. 49. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 252. Zoöl. Ser.

MUSK RAT. *Ondatra*, Indian name.

1. Adult ♂ Exch. Trousers Lake, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. J. Rowley.

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2. Adult ♀ Exch. Trousers Lake, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. J. Rowley.
3. Adult ♂ Exch. Hastings, New York. Am. Mus. Nat. Hist. N. Y. J. Rowley.
4–5. Adult — Pres. Indiana. A. Schubert.
6–9. Adult ♂ Coll. White Sulphur Springs, West Virginia. T. Surber.
10. Adult ♂ Pres. Laporte, Indiana. C. M. Barber.
11–12. Adult ♂ Pres. Chicago, Illinois. M. Kane.
13–14. Juv. ♂ P. Boulder, Colorado. R. T. Young.
15–16. Juv. ♀ P. Boulder, Colorado. R. T. Young.
17–18. Adult — Pres. Green Bay, Wisconsin. A. Schubert.
19. Adult ♀ Coll. Oakes, North Dakota. W. E. Snyder.
20. Adult ♀ Exch. Custer, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
21. Adult ♂ P. Kettle River, Alberta, Canada. G. F. Dippie.
22. Adult ♀ P. Swan Lake, Alberta, Canada. G. F. Dippie.

a. Fiber zibethicus pallidus Mearns.

Fiber zibethicus pallidus Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 280. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 213. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 308, fig. 55. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 253. Zoöl.Ser.

PALE MUSK RAT.

1–2. Adult ♂ Topotypes. Exch. Fort Verde, Arizona. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

510. Fiber spatulatus Osgood.

Fiber spatulatus Osgood, N. Am. Faun., No. 19, 1900, p. 36. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 214. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 254. Zoöl. Ser.

NORTHWEST TERRITORY MUSK RAT.

1. Adult ♂ Coll. Beaverton, Oregon. E. Heller.
2. Adult ♂ P. Cariboo, British Columbia. C. K. Worthern.

511. Fiber occipitalis Elliot.

Fiber occipitalis Elliot, Pub. Field Columb. Mus., III, 1903, p. 162, fig. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 254. Zoöl. Ser.

OREGON MUSK RAT.

1–3. Adult ♂ Paratypes. Coll. Florence, Oregon. E. Heller.
4. Adult ♀ Type. Coll. Florence, Oregon. E. Heller.

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512. Fiber obscurus Bangs.

Fiber obscurus Bangs, Proc. Biol. Soc. Wash., IX, 1894, p. 133. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 214. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 254. Zoöl. Ser.

DUSKY MUSK RAT.

1. Adult ♂ Exch. St. George's Bay, Newfoundland. Am. Mus. Nat. Hist. N. Y.

Genus 142. **Synaptomys. Lemming Voles.**

Synaptomys Baird, N. Am. Mamm., 1857, p. 558. Type *Synaptomys cooperi* Baird.

Subgenus A. **Synaptomys.**

513. Synaptomys cooperi Baird.

Synaptomys cooperi Baird, N. Am. Mamm., 1857, p. 558. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 203, fig. 45. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 255. Zoöl. Ser.

COOPER'S LEMMING VOLE.

1. Adult ♂ Coll. White Sulphur Springs, West Virginia. T. Surber.
2. Adult ♀ Coll. White Sulphur Springs, West Virginia. T. Surber.

514. Synaptomys fatuus Bangs.

Synaptomys fatuus Bangs, Proc. Biol. Soc. Wash., X, 1896, p. 47. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 204. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 256. Zoöl. Ser.

SILLY LEMMING VOLE.

1–2. Adult ♂ Topotypes. Coll. Lake Edward, Province of Quebec, Canada. T. Surber.

3. Adult ♀ Topotype. Coll. Lake Edward, Province of Quebec, Canada. T. Surber.

Genus 143. **Lemmus. Lemmings.**

Lemmus Link, Zool. Beyt. Natur., I, Pt. 2, 1795, p. 75. Type *Mus lemmus* Linnæus.

Myodes Pallas, Zoog. Rosso-Asiat., I, 1811, p. 172.

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Lemnus Rocherb., Actes Soc. Linn. Bordeaux, XII, 1841, No. 42, p. 216.

515. Lemmus trimucronatus (Richardson).

Arvicola trimucronatus Rich., Journ. Parry's 2d Voy., 1825, Append., p. 309.

Myodes albigularis Wagn., Schreb. Säugth., Suppl., III, 1843, p. 602.

Lemmus alascensis Merr., Proc. Wash. Acad. Scien., II, 1900, p. 26.

Lemmus trimucronatus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 207, fig. 47. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 258. Zoöl. Ser.

RICHARDSON'S LEMMING.

1–33. Adult ♂ P. Point Barrow, Alaska. E. A. McIlhenny.
34–48. Adult ♀ P. Point Barrow, Alaska. E. A. McIlhenny.
49–50. Juv. ♀ P. Point Barrow, Alaska. E. A. McIlhenny.

516. Lemmus lemmus (Linnæus).

Mus lemmus Linn., Syst. Nat., I, 1766, p 80. Miller, N. Am. Faun., No. 12, 1896, p. 37, figs. 11, 12.

EUROPEAN LEMMING.

1. Adult — P. Sweden. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 144. **Dicrostonyx. Forked-claw Lemmings.**

Dicrostonyx Glog., Gem. Hand-d. Hilfsb. Naturg., 1841, pp. XXXI, 97. Type *Mus hudsonius* Pallas.

Cuniculus Wagl., Nat. Syst. Amph., 1830, p. 121. (nec Brisson, nec Meyer.)

Myolemmus Pomel, Cat. Méth. Vert. Foss. Bass. Loire, 1854, p. 27.

Misothermus Hensel, Zeitsch. Deutsch. Geol. Gesellsch., VII, 1855, p. 492. (Part.)

Borioïkon Poliakoff, Ann. au tome XXXIX, Mém. Acad. St. Pétersb., No. 2, 1881, p. 35.

Tylonyx Schulze, Mamm. Europ. Hel. Abhandl. u. Vorträge Gesammtg. Naturw., Berlin, XIV, 1897, p. 83.

a. Dicrostonyx hudsonius nelsoni (Merriam).

Dicrostonyx nelsoni Merr., Proc. Wash. Acad. Scien., II, 1900, p. 25.

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Dicrostonyx hudsonius alascensis Stone, Proc. Acad. Nat. Scien. Phil., 1900, p. 37.

Dicrostonyx hudsonius nelsoni Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 210, fig. 48. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 260. Zoöl. Ser.

NELSON'S LEMMING.

1–5. Adult ♂ P. Point Barrow, Alaska. E. A. McIlhenny.
6. Adult ♀ P. Point Barrow, Alaska. E. A. McIlhenny.

Genus 145. **Lemmomys.**

Lemmomys Less., Nouv. Tabl. Règn. Anim., Mamm., 1842, p. 123. Type *Mus talpinus* Pallas.

Ellobius Fisch., Zoogn., III, 1814, p. 72. (nec *Ellobium* Bolton, 1798, Mollusca.)

517. Lemmomys talpinus (Pallas).

Mus talpinus Pall., Nov. Comm. Acad. Scien. Petrop., XIV, Pt. I, 1770, p. 568.

MOLE MOUSE.

1. Adult — P. Tamak. Th. Schmidt.

Family VII. **Spalacidæ. Mole Rats.**

Subfamily I. **Spalacinæ.**

Genus 146. **Spalax.**

Spalax Gueldenst., Nov. Comm. Acad. Scien. Petrop., XIV, Pt. I, 1770, p. 409. Type *Spalax microphthalmus* Gueldenstaedt.

Ommatostergus Nordm., Keyserl. & Blas. Wirbelth. Europ., 1840, pp. VII, 31.

518. Spalax typhlus Pallas.

Spalax typhlus Pall., Nov. Sp. Quad. Glir. Ord., 1778, p. 76.

GREAT MOLE RAT.

1. Adult — P. Kuslendji, Turkey. Ward's Nat. Scien. Establ., Rochester, N. Y.

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Family VIII. **Geomyidæ. Pouched Rats.**

Genus 147. **Geomys. Pocket Gophers.**

Geomys Rafin., Am. Month. Mag., II, No. 1, 1817, p. 45. Type *Geomys pinetis* Rafinesque = *Mus tuza* Ord.
Diplostoma Rafin., Am. Month. Mag., II, No. 1, 1817, p. 44.
Saccophorus Kuhl, Beitr. Zool. und vergl. Anat., 1820, p. 65.
Pseudostoma Say, Long's Exped. Rocky Mts., I, 1823, p. 406.
Ascomys Licht., Abhand. K. Akad. Wiss. Berl., 1825, p. 20, fig. 2.

519. Geomys tuza (Ord).
Mus tuza Ord, Guth. Geogr., 2d Amer. ed., II, 1815, p. 292.
Geomys pinetis Rafin., Am. Month. Mag., II, No. 1, 1817, p. 45.
Geomys tuza Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 215, fig. 50. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 261. Zoöl. Ser.
PINE BARRENS POCKET GOPHER.
1. Adult ♂ Coll. Rocky Ford, Georgia. T. Surber.

a. Geomys tuza floridanus (Audubon & Bachman).
Pseudostoma floridana Aud. & Bachm., Quad. N. Am., III, 1854, p. 242.
Geomys tuza floridanus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 215. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 261. Zoöl. Ser.
FLORIDA POCKET GOPHER.
1. Adult ♂ Coll. New Berlin, Florida. T. Surber.
2–6. Adult ♀ Coll. New Berlin, Florida. T. Surber.
7. Adult ♂ Coll. Citronelle, Florida. T. Surber.
8. Adult ♀ Coll. Citronelle, Florida. T. Surber.
9. Adult ♂ Coll. St. Charles Creek, Florida. T. Surber.
10. Adult ♂ Coll. Gainesville, Florida. T. Surber.
11–13. Adult ♀ Coll. Gainesville, Florida. T. Surber.
14–15. Adult ♀ Exch. Gainesville, Florida. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

b. Geomys tuza mobilensis Merriam.
Geomys tuza mobilensis Merr., N. Am. Faun., No. 8, 1895, p. 119, pls. & figs. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 216. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 262. Zoöl. Ser.
Geomys floridanus austrinus Bangs, Proc. Bost. Soc. Nat. Hist., 1898, p. 177.

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Geomys tuza austrinus Elliot, Pub. Field Columb. Mus., III, 1901, p. 49. Zoöl. Ser. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 217. Zoöl. Ser.

MOBILE POCKET GOPHER.

1–3. Adult ♂ Melanistic. Coll. St. Marys, Georgia. T. Surber.
4–8. Adult ♂ Coll. Tarpon Springs, Florida. T. Surber.
9–11. Adult ♀ Coll. Tarpon Springs, Florida. T. Surber.
12–13. Juv. ♀ Coll. Tarpon Springs, Florida. T. Surber.
14. Adult ♀ Exch. Tarpon Springs, Florida. Am. Mus. Nat. Hist. N. Y. W. E. D. Scott.

520. Geomys bursarius (Shaw).

Mus bursarius Shaw, Trans. Linn. Soc., V, 1800, p. 227, pl. 8.
Diplostoma fusca Rafin., Am. Month. Mag., II, No. 1, 1817, p. 45.
Geomys cinerea Rafin., Am. Month. Mag., II, No. 1, 1817, p. 45.
Saccophorus bursarius Kuhl, Beitr. Zool., 1820, p. 65.
Mus saccatus Mitch., N. Y. Med. Rep., VI, 1821, p. 249.
Ascomys canadensis Licht., Abh. K. Akad. Wiss. Berlin, 1825, p. 20, fig. 2.
Geomys oregonensis Le Conte, Proc. Acad. Nat. Scien. Phil., VI, 1852, p. 160.
Geomys bursarius Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 217. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 263. Zoöl. Ser.

SHAW'S POCKET GOPHER.

1–3. Adult ♂ Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
4. Juv. ♀ Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
5. Juv. ♂ Exch. St. Joseph County, Indiana. Am. Mus. Nat. Hist. N. Y. F. M. Noe.
6. Adult ♀ P. Lawrence, Kansas. J. Rowley.
7. Adult — P. ——? Ward's Nat. Scien. Establ., Rochester, N. Y.

521. Geomys lutescens (Merriam).

Geomys bursarius lutescens Merr., N. Am. Faun., No. 4, 1890, p. 51.
Geomys lutescens Merr., Mon. Geomyidæ, N. Am. Faun., No. 8, 1895, p. 127. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 218. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 263. Zoöl. Ser.

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PALE POCKET GOPHER.

1. Adult ♂ P. Boulder, Colorado. R. T. Young.
2–5. Adult ♀ P. Boulder, Colorado. R. T. Young.

522. Geomys breviceps Baird.

Geomys breviceps Baird, Proc. Acad. Nat. Scien. Phil., 1855, p. 335. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 218. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 263. Zoöl. Ser.

SHORT-HEADED POCKET GOPHER.

1–4. Adult ♂ Coll. Alva, Oklahoma Territory. T. Surber.
5–10. Adult ♀ Coll. Alva, Oklahoma Territory. T. Surber.

a. Geomys breviceps attwateri Merriam.

Geomys breviceps attwateri Merr., Mon. Geomyidæ, N. Am. Faun., No. 8, 1895, p. 135, pl. 9, fig. 3. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 219. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 263. Zoöl. Ser.

ATTWATER'S POCKET GOPHER.

1–3. Adult ♂ Topotypes. Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
4–5. Adult ♀ Topotypes. Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

523. Geomys texensis Merriam.

Geomys texensis Merr., Mon. Geomyidæ, N. Am. Faun., No. 8, 1895, p. 137, pls. & figs. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 219. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 264. Zoöl. Ser.

TEXAS POCKET GOPHER.

1. Adult ♂ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
2. Adult ♀ Exch. Fort Clark, Kinney County, Texas. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

Genus 148. **Cratogeomys. Powerful Pocket Gophers.**

Cratogeomys Merr., Mon. Geomyidæ, N. Am. Faun., No. 8, 1895, p. 150. Type *Geomys merriami* Thomas.

524. Cratogeomys perotensis Merriam.

Cratogeomys perotensis Merr., Mon. Geomyidæ, N. Am. Faun.,

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No. 8, 1895, p. 154, pl. 8, fig. 6. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 313. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 265. Zoöl. Ser.

PEROTE POCKET GOPHER.

1–3. Adult ♂ Coll. Mt. Orizaba, State of Vera Cruz, Mexico. Heller & Barber.

525. Cratogeomys estor Merriam.

Cratogeomys estor Merr., Mon. Geomyidæ, N. Am. Faun., No. 8, 1895, p. 155, pl. 8, figs. 4, 5. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 314. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 265. Zoöl. Ser.

LAS VIGAS POCKET GOPHER.

1–3. Adult ♂ Coll. Mt. Orizaba, State of Vera Cruz, Mexico. Heller & Barber.

526. Cratogeomys castanops (Baird).

Pseudostoma castanops Baird, Rep. Stansb. Exped. to Great Salt Lake, 1852, p. 313.

Geomys clarkii Baird, Proc. Acad. Nat. Scien. Phil., 1855, p. 332.

Cratogeomys castanops Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 220, fig. 51. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 315, figs. 57, XLVI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 266. Zoöl. Ser.

CHESTNUT-FACED POCKET GOPHER.

1. Adult ♂ Coll. Paladura Cañon, Texas. T. Surber.

2–3. Adult ♀ Coll. Paladura Cañon, Texas. T, Surber.

Genus 149. **Pappogeomys. Ancient Pocket Gophers.**

Pappogeomys Merr., Mon. Geomyidæ, N. Am. Faun., No. 8, 1895, p. 145, pls. and figs. Type *Geomys bulleri* Thomas.

527. Pappogeomys bulleri (Thomas).

Geomys bulleri Thos., Ann. Mag. Nat. Hist., 6th Ser., 1892, p. 196.

Geomys nelsoni Merr., Proc. Biol. Soc. Wash., VII, 1892, p. 164.

Pappogeomys bulleri Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 320, fig. 59. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 268. Zoöl. Ser.

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BULLER'S POCKET GOPHER.

1. Adult ♀ P. Sierra de Fuanacathan, Mexico. E. Gerrard & Sons.

Genus 150. **Orthogeomys. Straight-headed Pocket Gophers.**

Orthogeomys Merr., Mon. Geomyidæ, N. Am. Faun., No. 8, 1895, p. 172, pls. & figs. Type *Geomys scalops* Thomas.

528. Orthogeomys cuniculus Elliot.

Orthogeomys cuniculus Elliot, Proc. Biol. Soc. Wash., XVIII, 1905, p. 234.

BURROWING POCKET GOPHER.

1. Adult ♂ Type. Coll. *Zanatepec, State of Oaxaca, Mexico. Heller & Barber.
2. Juv. ♀ Paratype. Coll. Zanatepec, State of Oaxaca, Mexico. Heller & Barber.

Genus 151. **Heterogeomys. Distinct Pocket Gophers.**

Heterogeomys Merr., Mon. Geomyidæ, N. Am. Faun., No. 8, 1895, p. 179, pls. & figs. Type *Geomys hispidus* Le Conte.

529. Heterogeomys torridus Merriam.

Heterogeomys torridus Merr., Mon. Geomyidæ, N. Am. Faun., No. 8, 1895, p. 183, pls. & figs. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. 1, 1904, p. 326, fig. 61. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 270. Zoöl. Ser.

TROPICAL POCKET GOPHER.

1–2. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
3. Juv. ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
4–6. Juv. ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
7. Juv. ♀ Pres. Buenavista, Yucatan. G. F. Gaumer.

*By a misreading of the collector's label, the word not having been plainly written, the type locality was originally given as *Yautepec*, when it should have been ZANATEPEC.

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530. Heterogeomys lanius Elliot.

Heterogeomys lanius Elliot, Proc. Biol. Soc. Wash., XVIII, 1905, p. 235.

WOOLLY POCKET GOPHER.

1–2. Adult ♀ Type and paratype. Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber.

Genus 152. **Macrogeomys. Large Pocket Gophers.**

Macrogeomys Merr., Mon. Geomyidæ, N. Am. Faun., No. 8, 1895, p. 185. Type *Geomys heterodus* Peters.

531. Macrogeomys cherrii (Allen).

Geomys cherriei Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 337.

Macrogeomys cherrii Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 330, fig. 62. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 271. Zoöl. Ser.

CHERRIE'S POCKET GOPHER.

1–2. Adult — P. Jimenez, Costa Rica. A. Alfaro.

Genus 153. **Thomomys. Pocket Gophers.**

Thomomys Max., Nov. Act. Phys. Med. Acad. Cæs. Leop.-Carol., XIX, 1839, p. 377. Type *Thomomys rufescens* Maximilian.

Diplostoma Rich., Faun. Bor. Amer., Mamm., I, 1829, p. 206. (nec Rafinesque.)

Oryctomys Eyd. & Gerv., Mag. Zool., VI, 1836, p. 23. (Part.)

Megascapheus Elliot, Pub. Field Columb. Mus., III, 1903, p. 190. Zoöl. Ser.

Subgenus A. **Megascapheus.**

532. Thomomys bulbivorus (Richardson).

Diplostoma bulbivorum Rich., Faun. Bor. Amer., I, 1829, p. 206, pl. 18B.

Thomomys bulbivorus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 222. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 272. Zoöl. Ser.

GREAT POCKET GOPHER.

1–5. Adult ♀ Coll. McCoy, Oregon. E. Heller.

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6. Adult ♂ Coll. Beaverton, Oregon. E. Heller.
7-12. Adult ♀ Coll. Beaverton, Oregon. E. Heller.

Subgenus B. **Thomomys.**

533. Thomomys leucodon Merriam.

Thomomys leucodon Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 215. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 223. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 273. Zoöl. Ser.

WHITE-TOOTHED POCKET GOPHER.

1-4. Adult ♂ Topotypes. Coll. Grant's Pass, Oregon. E. Heller.
5-6. Adult ♀ Topotypes. Coll. Grant's Pass, Oregon. E. Heller.

534. Thomomys operarius Merriam.

Thomomys operarius Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 215. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 223. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 273. Zoöl. Ser.

WORKING POCKET GOPHER.

1-8. Adult ♂ Topotypes. Coll. Keeler, Inyo County, California. E. Heller.
9-14. Adult ♀ Topotypes. Coll. Keeler. Inyo County, California. E. Heller.

535. Thomomys scapterus Elliot.

Thomomys scapterus Elliot, Pub. Field Columb. Mus., III, 1903, p. 248. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 274. Zoöl. Ser.

DIGGER POCKET GOPHER.

1. Adult ♂ Type. Coll. Hannopee Cañon, Panamint Mountains, California. E. Heller.
2-4. Adult ♀ Coll. Coal Kilns, Panamint Mountains, California. E. Heller.
5. Juv. ♀ Paratype. Coll. Hannopee Cañon, Panamint Mountains, California. E. Heller.

536. Thomomys bottæ (Eydoux & Gervais).

Oryctomys bottæ Eyd. & Gerv., Mag. Zool., VI, 1836, p. 23, pl. XXI, fig. 4 (teeth).

Thomomys bottæ Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 223, fig. 52. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 274. Zoöl. Ser.

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BOTTA'S POCKET GOPHER.

1–4. Adult ♀ P. Portola, California. W. W. Price.
5. Adult ♂ P. Carmel River, California. W. W. Price.
6. Adult ♀ Exch. Alhambra, California. Am. Mus. Nat. Hist. N. Y. M. M. Green.
7. Adult ♂ P. Nicasio, California. C. K. Worthern.
8. Adult ♀ P. Nicasio, California. C. K. Worthern.
9. Adult ♂ Coll. Nicasio, California. E. Heller.
10. Adult ♂ P. Mendocino, California. F. Stephens.
11. Adult ♀ Coll. Mendocino, California. E. Heller.
12. Adult ♂ P. Coronado, California. F. Stephens.
13. Adult ♂ P. San Diego, California. F. Stephens.
14. Adult ♀ P. Bluff Lake, California. F. Stephens.
15–16. Adult ♂ P. Palo Alto, California. E. Heller.
17. Adult ♀ P. Palo Alto, California. E. Heller.
18–19. Adult ♀ Pres. Palo Alto, California. E. Heller.
20. Adult ♂ Coll. Point Reyes, California. E. Heller.
21–23. Adult ♀ Coll. Point Reyes, California. E. Heller.
24–27. Adult ♂ Coll. Petaluma, California. E. Heller.
28–29. Adult ♀ Coll. Petaluma, California. E. Heller.
30. Adult ♂ P. Santa Cruz, California. A. Forrer.
31. Adult ♀ P. Santa Cruz, California. A. Forrer.

537. Thomomys laticeps Baird.

Thomomys laticeps Baird, Proc. Acad. Nat. Scien. Phil., 1855, p. 335. Elliot, Syn. N. Am. Mamm, F. C. M. Pub., II, 1901, p. 224. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 274. Zoöl. Ser.

BROAD-HEADED POCKET GOPHER.

1–6. Adult ♂ Topotypes. Coll. Table Bluff, Humboldt Bay, California. E. Heller.
7–16. Adult ♀ Topotypes. Coll. Table Bluff, Humboldt Bay, California. E. Heller.
17–18. Adult ♂ Coll. Requa, California. E. Heller.
19–22. Adult ♀ Coll. Requa, California. E. Heller.
23–25. Adult ♂ Coll. Crescent City, California. E. Heller.
26–31. Adult ♀ Coll. Crescent City, California. E. Heller.

538. Thomomys monticola Allen.

Thomomys monticolus! Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 48.

Thomomys monticola Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 225. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 275. Zoöl. Ser.

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MOUNTAIN POCKET GOPHER.

1. Adult ♀ P. Pyramid Peak, California. W. W. Price.
2. Adult ♀ P. Bloods, California. W. W. Price.
3. Adult ♀ P. Big Trees, California. W. W. Price.
4. Juv. ♀ P. Big Trees, California. W. W. Price.
5. Juv. ♀ P. Hermit Valley, California. W. W. Price.
6–7. Adult ♂ P. Blue Lake, California. W. W. Price.
8–10. Adult ♂ P. Silver Lake, California. W. W. Price.
11–13. Adult ♀ P. Silver Lake, California. W. W. Price.
14. Adult ♂ P. Mt. Siegel, Nevada. W. W. Price.
15. Juv. ♀ P. Mt. Siegel, Nevada. W. W. Price.

a. Thomomys douglasi fuscus (Merriam).

Thomomys clusius fuscus Merr., N. Am. Faun., No. 5, 1891, p. 70.

Thomomys douglasi fuscus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 226. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 277. Zoöl. Ser.

SWARTHY POCKET GOPHER.

1–4. Adult ♀ P. Nederland, Colorado. R. T. Young.
5. Adult ♂ P. Okanagan, British Columbia, Canada. C. K. Worthern.
6–7. Adult ♀ P. Okanagan, British Columbia, Canada. C. K. Worthern.

539. Thomomys helleri Elliot.

Thomomys helleri Elliot, Pub. Field Columb. Mus., III, 1903, p. 165. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 278. Zoöl. Ser.

HELLER'S GOPHER.

1–3. Adult ♂ Paratypes. Coll. Goldbeach, Oregon. E. Heller.
4–10. Adult ♀ Type and paratypes. Coll. Goldbeach, Oregon. E. Heller.

540. Thomomys talpoides (Richardson).

Cricetus talpoides Rich., Zoöl. Jour., III, 1828, p. 518.

Geomys borealis Rich., Rep. Brit. Ass. for 1836, VI, 1837, p. 156.

Thomomys talpoides Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 227. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 278. Zoöl. Ser.

RICHARDSON'S POCKET GOPHER.

1–3. Adult ♂ P. Canon Ball River, North Dakota. G. K. Cherrie.
4–5. Adult ♀ P. Canon Ball River, North Dakota. G. K. Cherrie.

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6–7. Adult ♀ P. Dickinson, North Dakota. G. K. Cherrie.
8. Adult ♀ Coll. Braddock, North Dakota. W. E. Snyder.
9. Adult ♂ Coll. Bottineau, North Dakota. W. E. Snyder.
10. Adult ♀ Coll. Minot, North Dakota. W. E. Snyder.
11–12. Adult ♂ Coll. Jamestown, North Dakota. W. E. Snyder.
13. Adult ♀ Coll. Jamestown, North Dakota. W. E. Snyder.
14–16. Adult ♂ Coll. Minnewaukon, North Dakota. W. E. Snyder.
17–24. Adult ♂ P. Red Deer River, Alberta, Canada. G. F. Dippie.
25–26. Adult ♀ P. Red Deer River, Alberta, Canada. G. F. Dippie.

541. Thomomys melanops Merriam.

Thomomys melanops Merr., Proc. Biol. Soc. Wash., XIII, 1899, p. 21. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 227. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 279. Zoöl. Ser.

BLACK-FACED POCKET GOPHER.

1–2. Adult ♂ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.
3–4. Adult ♀ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.
5–7. Adult ♂ Coll. Boulder Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.
8. Juv. — Coll. Boulder Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

542. Thomomys fulvus (Woodhouse).

Geomys fulvus Woodh., Proc. Acad. Nat. Scien. Phil., 1852, p. 201.
Ascomys umbrinus Aud. & Bachm., Quad. N. Am., III, 1854, p. 307. (nec Richardson.)
Thomomys umbrinus Baird, N. Am. Mamm., 1857, p. 399. (Part.)
Thomomys fulvus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 227. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 334, fig. XLVII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 280. Zoöl. Ser.

FULVOUS POCKET GOPHER.

1–5. Adult ♂ P. Fairbank, Arizona. W. W. Price.
6–12. Adult ♀ P. Fairbank, Arizona. W. W. Price.
13. Adult ♀ P. Huaravas Mts., State of Sonora, Mexico. W. W. Price.

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14. Adult ♂ P. Fort Lowell, Arizona. W. W. Price.
15–16. Adult ♀ P. Fort Lowell, Arizona. W. W. Price.
17–18. Adult ♀ P. Graham Mts., Arizona. W. W. Price.
19–23. Adult ♀ P. White Mts., Arizona. W. W. Price.
24. Adult ♂ P. S-B. Ranch, Arizona. W. W. Price.
25–40. Adult ♀ P. S-B. Ranch, Arizona. W. W. Price.
41–45. Adult ♂ P. Chiricahua Mts., Arizona. W. W. Price.
46–53. Adult ♀ P. Chiricahua Mts., Arizona. W. W. Price.
54–58. Adult ♂ P. Los Angeles, California. J. Rowley.
59–63. Adult ♀ P. Los Angeles, California. J. Rowley.
64–66. Adult ♂ P. Cerro Blanco, State of Sonora, Mexico. J. Rowley.
67–69. Adult ♀ P. Cerro Blanco, State of Sonora, Mexico. J. Rowley.
70. Juv. ♀ P. Cerro Blanco, State of Sonora, Mexico. J. Rowley.
71–72. Adult ♀ Coll. Bailey's Ranch, California. E. Heller.
73–74. Adult ♂ Coll. Fort Tejon, California. E. Heller.

a. Thomomys fulvus nigricans Rhoads.

Thomomys fulvus nigricans Rhoads, Proc. Acad. Nat. Scien. Phil., 1895, p. 36. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 228. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 335. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 280. Zoöl. Ser.

BLACKISH POCKET GOPHER.

1. Adult ♂ Topotype. P. Witch Creek, San Diego County, California. F. Stephens.
2–3. Adult ♀ Topotypes. P. Witch Creek, San Diego County, California. F. Stephens.

543. *Thomomys umbrinus (Richardson).

Geomys umbrinus Rich., Faun. Bor. Amer., Mamm., I, 1829, p. 202.

RICHARDSON'S SOUTHERN POCKET GOPHER.

1–7. Adult ♀ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber.

544. Thomomys martirensis (Allen).

Thomomys fulvus martirensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1898, p. 147.

Thomomys martirensis Elliot, Mamm. Middle Amer. & W. Indies,

*See Bailey, Proc. Biol. Soc. Wash., XIX, 1906, p. 3.

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F. C. M. Pub., IV, Pt. I, 1904, p. 336. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 282. Zoöl. Ser.

SAN PEDRO MARTIR POCKET GOPHER.

1–5. Adult ♂ Coll. La Grulla, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

6–8. Adult ♀ Coll. La Grulla, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

9. Adult ♂ Coll. Vallecitos, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

10–11. Adult ♀ Coll. Vallecitos, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

12. Adult ♂ Coll. Hanson Lagoon, Hanson Laguna Mts., Lower California, Mexico. E. Heller.

13–16. Adult ♀ Coll. Hanson Lagoon, Hanson Laguna Mts., Lower California, Mexico. E. Heller.

17. Adult ♂ Coll. Aguaje de las Frasas, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

18. Adult ♀ Coll. Aguaje de las Frasas, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

19–20. Adult ♂ Coll. Santa Eulàlia, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

21–22. Adult ♀ Coll. Santa Eulalia, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

23. Adult ♀ Coll. Santa Rosa, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

24. Adult ♂ Coll. Mattomi, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

25–27. Adult ♂ Coll. Parral, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

28–29. Adult ♀ Coll. Parral, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

545. Thomomys aphrastus Elliot.

Thomomys aphrastus Elliot, Pub. Field Columb. Mus., III, 1903, p. 219. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 336. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 282. Zoöl. Ser.

TROUBLESOME POCKET GOPHER.

1–2. Adult ♂ Coll. Ensenada, Lower California, Mexico. E. Heller.

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3. Adult ♀ Coll. Ensenada, Lower California, Mexico. E. Heller.
4. Adult ♀ Coll. Trinidad, Lower California, Mexico. E. Heller.
5. Adult ♂ Type. Coll. San Tomas, Lower California, Mexico. E. Heller.
6. Adult ♀ Paratype. Coll. San Tomas, Lower California, Mexico. E. Heller.
7–8. Adult ♀ Coll. San Antonio, Lower California, Mexico. E. Heller.
9–10. Adult ♂ Coll. San Quentin, Lower California, Mexico. E. Heller.
11–15. Adult ♀ Coll. San Quentin, Lower California, Mexico. E. Heller.

546. Thomomys peregrinus Merriam.

Thomomys peregrinus Merr., Proc. Biol. Soc. Wash., VIII, 1893, p. 146. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 337. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 282. Zoöl. Ser.

WANDERING POCKET GOPHER.

1–3. Adult ♀ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

547. Thomomys alpinus Merriam.

Thomomys alpinus Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 216. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 229. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 283. Zoöl. Ser.

ALPINE POCKET GOPHER.

1. Adult ♂ Coll. Ramshaw Meadows, Mt. Whitney, California. E. Heller.
2–3. Adult ♀ Coll. Ramshaw Meadows, Mt. Whitney, California. E. Heller.
4–5. Adult ♂ Coll. Hot Springs, Mt. Whitney, California. E. Heller.
6. Adult ♀ Coll. Hot Springs, Mt. Whitney, California. E. Heller.
7. Adult ♀ Coll. Whitney Meadows, Mt. Whitney, California. E. Heller.
8–12. Adult ♂ Topotypes. Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.

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13–17. Adult ♀ Topotypes. Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.

548. Thomomys aureus Allen.

Thomomys aureus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 49. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 229. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 285. Zoöl. Ser.

GOLDEN POCKET GOPHER.

1. Adult ♀ Topotype. Exch. Bluff City, Utah. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

". *Thomomys aureus perpes* Merriam.

Thomomys aureus perpes Merr., Proc. Biol. Soc. Wash., XIV, 1901, p. 111. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 285. Zoöl. Ser.

LONE PINE POCKET GOPHER.

1. Adult ♂ Coll. Inyo Mts., California. E. Heller.
2. Adult ♀ Coll. Coso Mts., California. E. Heller.
3—6. Adult ♂ Topotypes. Coll. Lone Pine, Owens Valley, Inyo County, California. E. Heller.
7—17. Adult ♀ Topotypes. Coll. Lone Pine, Owens Valley, Inyo County, California. E. Heller.

549. Thomomys perpallidus (Merriam).

Thomomys talpoides perpallidus Merr., Science, VIII, 1886, p. 588.

Thomomys perpallidus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 229. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 340. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 286. Zoöl. Ser.

PALE POCKET GOPHER.

1—6. Adult ♂ Coll. Palm Springs, California. E. Heller.
7—11. Adult ♀ Coll. Palm Springs, California. E. Heller.
12. Adult ♂ Coll. Whitewater, California. E. Heller.
13. Adult ♀ Coll. Warren's Well, California. E. Heller.
14—15. Adult ♂ Coll. Daggett, California. E. Heller.
16. Adult ♀ Coll. Morongo Pass, California. E. Heller.
17. Adult ♀ Coll. Copper City, California. E. Heller.
18–20. Adult ♂ Coll. Oro Grande, California. E. Heller.
21–23. Adult ♀ Coll. Oro Grande, California. E. Heller.
24. Adult ♂ P. Carrizo Creek, California. F. Stephens.
25–26. Adult ♀ P. Carrizo Creek, California. F. Stephens.
27–29. Adult ♀ P. Salt Creek, California. F. Stephens.

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30. Adult ♀ Exch. Borego Springs, California. Am. Mus. Nat. Hist. N. Y.

550. Thomomys cabezonæ Merriam.

Thomomys cabezonæ Merr., Proc. Biol. Soc. Wash., XIV, 1901, p. 110. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 286. Zoöl. Ser.

CABEZON POCKET GOPHER.

1. Adult ♂ Coll. Whitewater, California. E. Heller.
2–7. Adult ♀ Coll. Whitewater, California. E. Heller.
8. Adult ♂ Coll. Banning, California. E. Heller.
9. Adult ♀ Coll. Banning, California. E. Heller.
10. Juv. ♂ Coll. Banning, California. E. Heller.

Family IX. **Heteromyidæ. Kangaroo Rats, Pocket Mice.**

Subfamily I. **Dipodomyinæ.**

Genus 154. **Dipodomys. Four-toed Kangaroo Rats.**

Dipodomys Gray, Ann. Mag. Nat. Hist., 1st Ser., VII, 1841, p. 521. Type *Dipodomys phillipsi* Gray.

Macrocolus Wagn., Schreb. Säugth., Suppl., IV, 1844, pl. CCXXXIX, (teeth).

551. Dipodomys merriami Mearns.

Dipodomys merriami Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 290. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 232, fig. 53. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 345, fig. XLVIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 288. Zoöl. Ser.

MERRIAM'S KANGAROO RAT.

1–23. Adult ♂ P. Fairbank, Arizona. W. W. Price.
24–44. Adult ♀ P. Fairbank, Arizona. W. W. Price.
45–57. Adult ♂ P. S-B. Ranch, Arizona. W. W. Price.
58–62. Adult ♀ P. S-B. Ranch, Arizona. W. W. Price.
63–68. Adult ♂ P. Fort Lowell, Arizona. W. W. Price.
69–72. Adult ♀ P. Fort Lowell, Arizona. W. W. Price.
73. Juv. — P. Fort Lowell, Arizona. W. W. Price.
74. Adult ♂ P. Cerro Blanco, State of Sonora, Mexico. J. Rowley.

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FIG. XXXVI. DIPODOMYS MERRIAMI.
MERRIAM'S KANGAROO RAT.

75–77. Adult ♀ P. Cerro Blanco, State of Sonora, Mexico. J. Rowley.

78–83. Adult ♂ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

84–94. Adult ♀ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

a. Dipodomys merriami nitratus Merriam.

Dipodomys merriami nitratus Merr., Proc. Biol. Soc. Wash., IX, 1894, p. 112. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 233. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 288. Zoöl. Ser.

KEELER KANGAROO RAT.

1–4. Adult ♂ Topotypes. Coll. Keeler, Owens Valley, Inyo County, California. E. Heller.

5–6. Adult ♀ Topotypes. Coll. Keeler, Owens Valley, Inyo County, California. E. Heller.

7–12. Adult ♂ Coll. Lone Pine, Owens Valley, Inyo County, California. E. Heller.

13–16. Adult ♀ Coll. Lone Pine, Owens Valley, Inyo County, California. E. Heller.

b. Dipodomys merriami ambiguus (Merriam).

Dipodomys ambiguus Merr., N. Am. Faun., No. 4, 1890, p. 42.

Dipodomys merriami ambiguus Elliot Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 234. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 346. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 289. Zoöl. Ser.

DOUBTFUL KANGAROO RAT.

1–6. Adult ♂ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

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7–16. Adult ♀ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

c. Dipodomys merriami parvus (Rhoads).

Dipodomys parvus Rhoads, Amer. Nat., XXVIII, 1894, p. 70.

Dipodomys merriami parvus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 234. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 346. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 289. Zoöl. Ser.

SMALL KANGAROO RAT.

1. Adult ♀ P. Elsinore, Riverside County, California. J. Rowley.

2. Adult ♀ P. Aguanga, Riverside County, California. F. Stephens.

d. Dipodomys merriami simiolus (Rhoads).

Dipodomys simiolus Rhoads, Proc. Acad. Nat. Scien. Phil., 1894, p. 410.

Dipodomys similis Rhoads, Proc. Acad. Nat. Scien. Phil., 1894, p. 411.

Dipodomys merriami simiolus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 234. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, I. 347. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 289. Zoöl. Ser.

Dipodomys merriami similis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 234. Zoöl. Ser.

ALLIED KANGAROO RAT.

1–12. Adult ♂ Coll. Palm Springs, California. E. Heller.
13–20. Adult ♀ Coll. Palm Springs, California. E. Heller.
21–26. Adult ♂ Coll. Whitewater, California. E. Heller.
27–32. Adult ♀ Coll. Whitewater, California. E. Heller.
33–35. Adult ♂ Coll. Burn's Cañon, California. E. Heller.
36. Adult ♀ Coll. Burn's Cañon, California. E. Heller.
37–41. Adult ♂ Coll. Morongo Pass, California. E. Heller.
42–43. Adult ♀ Coll. Morongo Pass, California. E. Heller.
44–45. Adult ♂ Coll. Oro Grande, California. E. Heller.
46. Adult ♂ Coll. Old Woman's Spring, California. E. Heller.
47–48. Adult ♀ Coll. Old Woman's Spring, California. E. Heller
49. Adult ♂ Coll. Warren's Well, California. E. Heller.
50–51. Adult ♂ Coll. Daggett, California. E. Heller.
52–55. Adult ♀ Coll. Daggett, California. E. Heller.
56. Adult ♂ P. Borego Springs, California. F. Stephens.

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57. Adult ♀ P. Borego Springs, California. F. Stephens.
58. Adult ♂ P. Carriso Creek, California. F. Stephens.
59–60. Adult ♀ P. Carriso Creek, California. F. Stephens.

e. Dipodomys merriami mortivallis Elliot.

Dipodomys merriami mortivallis Elliot, Pub. Field Columb. Mus., III, 1903, p. 250. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 290. Zoöl. Ser.

DEATH VALLEY KANGAROO RAT.

1. Adult ♂ Coll. Ballarat, Inyo County, California. E. Heller.
2. Adult ♀ Coll. Mesquite Valley, Inyo County, California. E. Heller.
3–6. Adult ♂ Type and paratypes. Coll. Furnace Creek, Death Valley, California. E. Heller.
7. Adult ♀ Paratype. Coll. Furnace Creek, Death Valley, California. E. Heller.

f. Dipodomys merriami arenivagus Elliot.

Dipodomys merriami arenivagus Elliot, Pub. Field Columb. Mus., III, 1903, p. 249. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 347. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 290. Zoöl. Ser.

SAN FELIPE KANGAROO RAT.

1–4. Adult ♂ Type and paratypes. Coll. San Felipe, Lower California, Mexico. E. Heller.
5–9. Adult ♀ Paratypes. Coll. San Felipe, Lower California, Mexico. E. Heller.
10. Adult ♂ Coll. Cañon Esperanza, Lower California, Mexico. E. Heller.

552. Dipodomys californicus Merriam.

Dipodomys californicus Merr., N. Am. Faun., No. 4, 1890, p. 49. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 236. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 291. Zoöl. Ser.

CALIFORNIA KANGAROO RAT.

1–4. Adult ♂ P. Nicasio, California. C. A. Allen.
5–8. Adult ♀ P. Nicasio, California. C. A. Allen.
9–10. Adult ♂ P. San Luis Rey, San Diego County, California. A. Forrer.
11. Adult ♀ P. San Luis Rey, San Diego County, California. A. Forrer.

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553. Dipodomys deserti Stephens.

Dipodomys deserti Stephens, Amer. Nat., XXI, 1887, p. 42. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 235. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 345. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 292. Zoöl. Ser.

DESERT KANGAROO RAT.

1–4. Adult ♂ Exch. Borego Springs, Colorado Desert, California. Am. Mus. Nat. Hist. N. Y. F. Stephens.
5. Adult ♀ Exch. San Diego County, California. Am. Mus. Nat. Hist. N. Y. F. Stephens.
6–8. Adult ♂ Coll. Palm Springs, California. E. Heller.
9. Adult ♀ Coll. Palm Springs, California. E. Heller.
10–21. Adult ♂ Coll. Daggett, California. E. Heller.
22–36. Adult ♀ Coll. Daggett, California. E. Heller.
37–41. Adult ♂ Coll. San Felipe, Lower California, Mexico. E. Heller.
42–47. Adult ♀ Coll. San Felipe, Lower California, Mexico. E. Heller.
48–49. Adult ♂ Coll. Ballarat, Inyo County, California. E. Heller.
50. Adult ♀ Coll. Ballarat, Inyo County, California. E. Heller.
51–55. Adult ♂ Coll. Furnace Creek, Death Valley, California. E. Heller.
56–57. Adult ♀ Coll. Furnace Creek, Death Valley, California. E. Heller.

a. Dipodomys deserti helleri Elliot.

Dipodomys deserti helleri Elliot, Pub. Field Columb. Mus., III, 1903, p. 249. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 292. Zoöl. Ser.

HELLER'S KANGAROO RAT.

1–5. Adult ♂ Type and paratypes. Coll. Keeler, Inyo County, California. E. Heller.
6. Adult ♀ Paratype. Coll. Keeler, Inyo County, California. E. Heller.

554. Dipodomys spectabilis Merriam.

Dipodomys spectabilis Merr., N. Am. Faun., No. 4, 1890, p. 46. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 235. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M.

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Pub., IV, Pt. I, 1904, p. 345. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 293. Zoöl. Ser.

NOTABLE KANGAROO RAT.

1–2. Adult ♂ P. S-B. Ranch, Arizona. W. W. Price.
3. Adult ♀ P. S-B. Ranch, Arizona. W. W. Price.
4–8. Adult ♂ P. Fairbank, Arizona. W. W. Price.
9–13. Adult ♀ P. Fairbank, Arizona. W. W. Price.
14–22. Adult ♂ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.
23–27. Adult ♀ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.
28–29. Adult ♀ P. Cerro Blanco, State of Sonora, Mexico. J. Rowley.

Genus 155. **Perodipus. Five-toed Kangaroo Rats.**

Perodipus Fitzin., Sitz. Math.-Natur. Classe K. Akad. Wiss. Wien, LVI, 1867, p. 126. Type *Dipodomys agilis* Gambel.

Dipodops Merr., N. Am. Faun., No. 3, 1890, p. 72.

555. Perodipus agilis (Gambel).

Dipodomys agilis Gambel, Proc. Acad. Nat. Scien. Phil., 1848, p. 77.

Dipodomys hermanni Le Conte, Proc. Acad. Nat. Scien. Phil., 1853, p. 224.

?*Dipodomys wagneri* Le Conte, Proc. Acad. Nat. Scien. Phil., 1853, p. 224.

Perodipus agilis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 236, fig. 54. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 351. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 293. Zoöl. Ser.

NIMBLE KANGAROO RAT.

1–4. Adult ♂ P. Riverside, California. E. Heller.
5–9. Adult ♀ P. Riverside, California. E. Heller.
10–11. Adult ♂ P. Jamul, California. E. Heller.
12–13. Adult ♂ Exch. San Luis Rey, California. Am. Mus. Nat. Hist. N. Y. F. X. Holzner.
14. Adult ♂ Exch. Jacumba, California. Am. Mus. Nat. Hist. N. Y. F. Stephens.

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15. Adult ♂ Exch. Santa Isabella, California. Am. Mus Nat. Hist. N. Y. F. Stephens.
16. Adult ♀ Exch. San Pasqual Valley, California. Am Mus. Nat. Hist. N. Y. C. H. Marsh.
17. Adult ♀ P. Dulzura, California. J. Rowley.
18. Adult ♂ Coll. Elsinore, California. E. Heller.
19. Adult ♀ Coll. Sorrento, California. E. Heller.
20. Adult ♂ Coll. Banning, California. E. Heller.
21–24. Adult ♂ Coll. Castac Lake, Fort Tejon, California. E Heller.
25–28. Adult ♀ Coll. Castac Lake, Fort Tejon, California. E. Heller.
29. Adult ♂ Coll. Piru Creek, Fort Tejon, California. E. Heller.
30. Adult ♀ Coll. Piru Creek, Fort Tejon, California. E Heller.
31. Adult ♂ Coll. Lockwood Valley, Mt. Pinos, California E. Heller.
32–34. Adult ♀ Coll. Lockwood Valley, Mt. Pinos, California E. Heller.
35–42. Adult ♂ Coll. Santa Eulalia, Lower California, Mexico E. Heller.
43–52. Adult ♀ Coll. Santa Eulalia, Lower California, Mexico E. Heller.
53. Adult ♂ Coll. San Matias Spring, Lower California Mexico. E. Heller.
54. Adult ♀ Coll. San Matias Spring, Lower California Mexico. E. Heller.
55. Adult ♂ Coll. Las Eucinas, Lower California, Mexico. E Heller.
56–59. Adult ♂ Coll. San Tomas, Lower California, Mexico. E Heller.
60. Adult ♀ Coll. San Tomas, Lower California, Mexico. E Heller.
61–63. Adult ♂ Coll. Rosarito, Lower California, Mexico. E Heller.
64–66. Adult ♀ Coll. Rosarito, Lower California, Mexico. E Heller.
67. Adult ♂ Coll. Agua Escondido, Lower California, Mexico E. Heller.
68–71. Adult ♂ Coll. San Quentin, Lower California, Mexico E. Heller.

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72–73. Adult ♀ Coll. San Quentin, Lower California, Mexico. E. Heller.
74. Adult ♂ Coll. El Alamo, Lower California, Mexico. E. Heller.
75. Adult ♀ Coll. El Alamo, Lower California, Mexico. E. Heller.
76. Adult ♀ Coll. Santa Rosa, Lower California, Mexico. E. Heller.
77. Adult ♂ Coll. Head of San Antonio River, Lower California, Mexico. E. Heller.
78–79. Adult ♀ Coll. Head of San Antonio River, Lower California, Mexico. E. Heller.
80–82. Adult ♂ Coll. Ensenada, Lower California, Mexico. E. Heller.
83–87. Adult ♀ Coll. Ensenada, Lower California, Mexico. E. Heller.
88–89. Adult ♂ Coll. Trinidad, Lower California, Mexico. E. Heller.
90. Adult ♀ Coll. Trinidad, Lower California, Mexico. E. Heller.

556. Perodipus streatori Merriam.

Perodipus streatori Merr., Proc. Biol. Soc. Wash., IX, 1894, p. 113. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 237. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 294. Zoöl. Ser.

STREATOR'S KANGAROO RAT.

1–4. Adult ♂ Coll. Fort Tejon, California. E. Heller.
5. Adult ♀ Coll. Fort Tejon, California. E. Heller.
6–8. Adult ♂ Coll. Neenach, Los Angeles County, California. E. Heller.
9–10. Adult ♀ Coll. Neenach, Los Angeles County, California. E. Heller.

557. Perodipus panamintinus Merriam.

Perodipus panamintinus Merr., Proc. Biol. Soc. Wash., IX, 1894, p. 114. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 239. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 295. Zoöl. Ser.

PANAMINT KANGAROO RAT.

1–11. Adult ♂ Coll. Lone Pine, Inyo County, California. E. Heller.
12–18. Adult ♀ Coll. Lone Pine, Inyo County, California. E. Heller.

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558. Perodipus richardsoni (Allen).

Dipodops richardsoni Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 277.

Perodipus richardsoni Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 238. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 297. Zoöl. Ser.

RICHARDSON'S KANGAROO RAT.

1–2. Adult ♂ Exch. Perch, Nebraska. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

3. Adult ♂ Paratype. Exch. Beaver River, Indian Territory Am. Mus. Nat. Hist. N. Y. W. W. Granger.

4–5. Adult ♂ Coll. Coolidge, Kansas. T. Surber.

6–20. Adult ♂ Coll. Alva, Oklahoma Territory. T. Surber.

21–35. Adult ♀ Coll. Alva, Oklahoma Territory. T. Surber.

559. Perodipus chapmani (Mearns).

Dipodomys chapmani Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 291.

Perodipus chapmani Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 237. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 350, fig. 66. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 297. Zoöl. Ser.

CHAPMAN'S KANGAROO RAT.

1–5. Adult ♂ P. Fairbank, Arizona. Price & Condit.

6. Adult ♀ P. Fairbank, Arizona. Price & Condit.

560. Perodipus longipes (Merriam).

Dipodops longipes Merr., N. Am. Faun., No. 3, 1890, p. 72.

Perodipus longipes Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 239. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 298. Zoöl. Ser.

LONG-FOOTED KANGAROO RAT.

1. Adult ♂ Exch. Bitter Creek, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

2–3. Adult ♀ Exch. Bitter Creek, Wyoming. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

4–5. Adult ♂ Exch. Uncompaghre Indian Reservation, Utah. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

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Subfamily II. **Heteromyinæ.**

Genus 156. **Perognathus. Pocket Mice.**

Perognathus Max., Reise Innere N. Amer., I, 1839, pp. 449-450. Type *Perognathus fasciatus* Maximilian.

Cricetodipus Peale, Mamm. & Ornith. U. S. Expl. Exped., 1848, p. 53, pl. 13, fig. 2.

Abromys (sic) Gray, Proc. Zoöl. Soc., 1868, p. 202.

Otognosis Coues, Proc. Acad. Nat. Scien. Phil., 1875, p. 305.

Chætodipus Merr., N. Am. Faun., No. 1, 1889, p. 5, pl. III, fig. 15.

Subgenus A. **Peragnathus.**

561. Perognathus fasciatus Maximilian.

Perognathus fasciatus Max., Nov. Act. Acad. Cæs. Leop.-Carol., XIX, Pt. I, 1839, p. 369, pl. XXXIV. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 242. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 300. Zoöl. Ser.

MAXIMILIAN'S POCKET MOUSE.

1. Adult ♂ Exch. Perch, Nebraska. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
2. Adult ♀ Exch. Pine Ridge, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

562. Perognathus merriami Allen.

Cricetodipus flavus Thomas, Proc. Zoöl. Soc., 1888, p. 449. (nec Baird.)

Perognathus merriami Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1892, p. 45, pl. III, figs. 1–6. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 243. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 353, figs. 67, XLIX. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 301. Zoöl. Ser.

Perognathus mearnsi Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1896, p. 237.

MERRIAM'S POCKET MOUSE.

1. Adult ♂ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
2. Adult ♀ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

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3–4. Adult ♀ Topotypes. Exch. Brownsville, Texas. Am. Mus. Nat. Hist. N. Y. F. B. Armstrong.

563. Perognathus flavus Baird.

Perognathus flavus Baird, Proc. Acad. Nat. Scien. Phil., 1855, p. 332. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 244, fig. 56. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 354. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 302. Zoöl. Ser.

BAIRD'S POCKET MOUSE.

1–2. Adult ♀ P. Fairbank, Arizona. W. W. Price.
3. Adult ♂ P. Fort Lowell, Arizona. W. W. Price.
4. Adult ♀ P. Fort Lowell, Arizona. W. W. Price.
5. Adult ♂ P. Chiricahua Mountains, Arizona. W. W. Price.

a. Perognathus flavus bimaculatus (Merriam).

Perognathus bimaculatus Merr., N. Am. Faun., No. I, 1889, p. 12.

Perognathus apache Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 71. (Part.)

Perognathus flavus bimaculatus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 244. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 302. Zoöl. Ser.

YAVAPAI POCKET MOUSE.

1–3. Adult ♀ Exch. Riverview, Utah. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.
4–7. Adult ♂ P. Holbrook, Arizona. W. W. Price.
8. Adult ♀ P. Holbrook, Arizona. W. W. Price.

564. Perognathus apache Merriam.

Perognathus apache Merr., N. Am. Faun., No. I, 1889, p. 14. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 244. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 303. Zoöl. Ser.

APACHE POCKET MOUSE.

1. Adult ♀ P. Fort Lowell, Arizona. W. W. Price.

565. Perognathus pericalles Elliot.

Perognathus pericalles Elliot, Pub. Field Columb. Mus., III, 1903, p. 252. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 303. Zoöl. Ser.

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BEAUTIFUL POCKET MOUSE.

1. Adult ♂ Type. Coll. Keeler, Owens Valley, Inyo County, California. E. Heller.
2. Adult ♀ Paratype. Coll. Keeler, Owens Valley, Inyo County, California. E. Heller.

566. Perognathus elibatus Elliot.

Perognathus elibatus Elliot, Pub. Field Columb. Mus., III, 1903, p. 252. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 304. Zoöl. Ser.

MOUNT PINOS POCKET MOUSE.

1–7. Adult ♂ Type and paratypes. Coll. Mount Pinos, Ventura County, California. E. Heller.
8–9. Adult ♀ Paratypes. Coll. Mount Pinos, Ventura County, California. E. Heller.

567. Perognathus panamintinus (Merriam).

Perognathus longimembris panamintinus Merr., Proc. Acad. Nat. Scien. Phil., 1894, p. 265.

Perognathus panamintinus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 245. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 304. Zoöl. Ser.

PANAMINT MOUNTAINS POCKET MOUSE.

1–7. Adult ♂ Coll. Wild Rose Springs, Panamint Mountains, California. E. Heller.
8–10. Adult ♀ Coll. Wild Rose Springs, Panamint Mountains, California. E. Heller.

a. Perognathus panamintinus bangsi (Mearns).

Perognathus longimembris bangsi Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1898, p. 300.

Perognathus panamintinus bangsi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 245. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 305. Zoöl. Ser.

BANGS'S POCKET MOUSE.

1. Adult ♀ Coll. Piru Creek, California. E. Heller.
2. Adult ♀ Coll. Fort Tejon, California. E. Heller.
3–12. Adult ♂ Coll. Oro Grande, California. E. Heller.
13–16. Adult ♂ Coll. Daggett, California. E. Heller.
17. Adult ♀ Coll. Daggett, California. E. Heller.
18–25. Adult ♂ Coll. Lane's Mills, California. E. Heller.
26–37. Adult ♂ Coll. Copper City, California. E. Heller.

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38. Adult ♀ Coll. Copper City, California. E. Heller.
39–43. Adult ♂ Coll. Ballarat, California. E. Heller.

b. Perognathus panamintinus brevinasus Osgood.

Perognathus panamintinus brevinasus Osgood, N. Am. Faun., No. 18, 1900, p. 30. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 246. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 355. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 305. Zoöl. Ser.

SHORT-NOSED POCKET MOUSE.

1. Adult ♀ Exch. Jacumba, California. Am. Mus. Nat. Hist. N. Y. F. X. Holzner.

568. Perognathus longimembris (Coues).

Otognosis longimembris Coues, Proc. Acad. Nat. Scien. Phil., 1875, p. 305.

Cricetodipus parvus True, Proc. U. S. Nat. Mus., 1882, p. 474.

Perognathus inornatus Merr., N. Am. Faun., No. 1, 1889, p. 15.

Perognathus longimembris Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 247. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 306. Zoöl. Ser.

SAN JOAQUIN POCKET MOUSE.

1–8. Adult ♂ Topotypes. Coll. Fort Tejon, California. E. Heller.
9–16. Adult ♀ Topotypes. Coll. Fort Tejon, California. E. Heller.

a. Perognathus monticola olivaceus (Merriam).

Perognathus olivaceus Merr., N. Am. Faun., No. 1, 1889, p. 15.

Perognathus olivaceus amœnus Merr., N. Am. Faun., No. 1, 1889, p. 16.

Perognathus monticola olivaceus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 249. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 307. Zoöl. Ser.

GREAT BASIN POCKET MOUSE.

1. Adult ♀ P. Mt. Siegel, Nevada. W. W. Price.
2–5. Adult ♂ Coll. Inyo Mountains, summits E. of Lone Pine, California. E. Heller.
6–7. Adult ♀ Coll. Inyo Mountains, summits E. of Lone Pine, California. E. Heller.

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569. Perognathus lordi (Gray).

Abromys (sic) *lordi* Gray, Proc. Zoöl. Soc., 1868, p. 202.

Perognathus lordi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 250. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 308. Zoöl. Ser.

NORTHWEST POCKET MOUSE.

1. Adult ♂ P. Okanagan, British Columbia, Canada. C. K. Worthern.
2. Adult ♀ P. Okanagan, British Columbia, Canada. C. K. Worthern.

570. Perognathus formosus Merriam.

Perognathus formosus Merr., N. Am. Faun., No. 1, 1889, p. 17. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 250. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 308. Zoöl. Ser.

LONG-TAILED POCKET MOUSE.

1–2. Adult ♂ Coll. Morongo Pass, California. E. Heller.
3–5. Adult ♂ Coll. Victor, California. E. Heller.
6–11. Adult ♂ Coll. Old Woman's Spring, California. E. Heller.
12. Adult ♀ Coll. Old Woman's Spring, California. E. Heller.
13–19. Adult ♂ Coll. Oro Grande, California. E. Heller.
20–22. Adult ♀ Coll. Oro Grande, California. E. Heller.
23–30. Adult ♂ Coll. Daggett, California. E. Heller.
31–32. Adult ♀ Coll. Daggett, California. E. Heller.
33–38. Adult ♂ Coll. Lone Willow Springs, California. E. Heller.
39–40. Adult ♀ Coll. Lone Willow Springs, California. E. Heller.
41. Adult ♂ Coll. Copper City, California. E. Heller.
42. Adult ♂ Coll. Ballarat, California. E. Heller.
43–46. Adult ♂ Coll. Wild Rose Springs, California. E. Heller.
47–52. Adult ♀ Coll. Wild Rose Springs, California. E. Heller.
53–54. Adult ♂ Coll. Hannopee Cañon, California. E. Heller.
55. Adult ♀ Coll. Hannopee Cañon, California. E. Heller.
56–64. Adult ♂ Coll. Furnace Creek, Death Valley, California. E. Heller.
65–68. Adult ♀ Coll. Furnace Creek, Death Valley, California. E. Heller.

571. Perognathus mesembrinus Elliot.

Perognathus mesembrinus Elliot, Pub. Field Columb. Mus., III, 1903, p. 251. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 308. Zoöl. Ser.

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SOUTHERN POCKET MOUSE.

1–12. Adult ♂ Type and paratypes. Coll. Palm Springs, California. E. Heller.

13. Adult ♀ Paratype. Coll. Palm Springs, California. E. Heller.

Subgenus B. **Chætodipus.**

a. Perognathus baileyi rhydinorhis Elliot.

Perognathus baileyi rhydinorhis Elliot, Pub. Field Columb. Mus., III, 1903, p. 167. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 362. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 309. Zoöl. Ser.

SAN QUENTIN POCKET MOUSE.

1–2. Adult ♂ Coll. Juncolito Springs, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

3. Adult ♀ Coll. Juncolito Springs, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

4. Adult ♂ Coll. Rosarito, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

5–12. Adult ♂ Type and paratypes. Coll. San Quentin, Lower California, Mexico. E. Heller.

13–14. Adult ♀ Paratypes. Coll. San Quentin, Lower California, Mexico. E. Heller.

572. Perognathus cnecus Elliot.

Perognathus cnecus Elliot, Pub. Field Columb. Mus., III, 1903, p. 169. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 362. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 309. Zoöl. Ser.

BUFF-COLORED POCKET MOUSE.

1. Adult ♂ Type. Coll. Rosarito, Lower California, Mexico. E. Heller.

573. Perognathus hispidus Baird.

Perognathus fasciatus Baird, N. Amer. Mamm., 1857, p. 420 (nec Max.)

Perognathus hispidus Baird, N. Amer. Mamm., 1857, p. 421. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 251. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 360. Zoöl. Ser. *Id.* Check-L. Mamm.

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N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 309. Zoöl. Ser.

Perognathus paradoxus spilotus Merr., N. Am. Faun., No. 1, 1889, p. 25.

HISPID POCKET MOUSE.

1. Adult ♂ Exch. Brownsville, Texas. Am. Mus. Nat. Hist. N. Y. F. B. Armstrong.

2–3. Adult ♂ P. Brownsville, Texas. C. K. Worthern.

4–5. Adult ♀ P. Brownsville, Texas. C. K. Worthern.

a. Perognathus hispidus paradoxus (Merriam).

Perognathus paradoxus Merr., N. Am. Faun., No. 1, 1889, p. 24.

Perognathus latirostris Rhoads, Amer. Nat., XXVIII, 1894, p. 185.

Perognathus conditi Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1894, p. 318.

Perognathus hispidus paradoxus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 252. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. 1, 1904, p. 361. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 310. Zoöl. Ser.

KANSAS POCKET MOUSE.

1–3. Adult ♂ Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

4–6. Adult ♀ Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

7. Adult ♂ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

8. Adult ♀ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

9. Adult ♂ Exch. Pine Ridge, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

b. Perognathus hispidus maximus Elliot.

Perognathus hispidus maximus Elliot, Pub. Field Columb. Mus., III, 1903, p. 253. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 310. Zoöl. Ser.

GREAT POCKET MOUSE.

1–3. Adult ♂ Type and paratypes. Coll. Noble, Oklahoma Territory. T. Surber.

4–5. Adult ♀ Paratypes. Coll. Noble, Oklahoma Territory. T. Surber.

6. Juv. ♂ Paratype. Coll. Noble, Oklahoma Territory. T. Surber.

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7–12. Adult ♂ Coll. Alva, Oklahoma Territory. T. Surber.
13–16. Adult ♀ Coll. Alva, Oklahoma Territory. T. Surber.
17. Adult ♂ Coll. White Horse Spring, Oklahoma Territory. T. Surber.
18. Adult ♀ Coll. White Horse Spring, Oklahoma Territory. T. Surber.
19. Juv. ♂ Coll. White Horse Spring, Oklahoma Territory. T. Surber.
20. Adult ♂ Coll. Arnettville, Oklahoma Territory. T. Surber.
21. Adult ♀ Coll. Arnettville, Oklahoma Territory. T. Surber.

574. Perognathus penicillatus Woodhouse.

Perognathus penicillatus Woodh., Proc. Acad. Nat. Scien. Phil., 1852, p. 200. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 252. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 311. Zoöl. Ser.

DESERT POCKET MOUSE.

1. Adult ♂ Exch. Walters, Colorado Desert, California. Am. Mus. Nat. Hist. N. Y. F. Stephens.
2. Adult ♂ Exch. Gardner's Lagoon, Lower California, Mexico. Am. Mus. Nat. Hist. N. Y. F. X. Holzner.
3. Adult ♀ Exch. Salt Creek, Colorado Desert, California. Am. Mus. Nat. Hist. N. Y. F. Stephens.
4. Adult ♀ Exch. Carriso Creek, Colorado Desert, California. Am. Mus. Nat. Hist. N. Y. F. Stephens.
5–8. Adult ♂ Coll. Palm Springs, California. E. Heller.
9–12. Adult ♂ Coll. Whitewater, California. E. Heller.
13–14. Adult ♂ Coll. Morongo Pass, California. E. Heller.
15–16. Adult ♂ Coll. Oro Grande, California. E. Heller.
17–18. Adult ♀ Coll. Oro Grande, California. E. Heller.
19. Adult ♂ Coll. Daggett, California. E. Heller.

a. Perognathus penicillatus angustirostris Osgood.

Perognathus penicillatus angustirostris Osgood, N. Am. Faun., No. 18, 1900, p. 47. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 252. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 358. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 311. Zoöl. Ser.

SLENDER-NOSED POCKET MOUSE.

1. Adult ♂ P. Palmetto Springs, California. F. Stephens.

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2–3. Adult ♀ P. Vallecitos, California. F. Stephens.
4. Adult — P. Vallecitos, California. F. Stephens.
5. Adult ♂ P. New River, California. F. Stephens.
6. Adult ♀ P. New River, California. F. Stephens.
7. Adult ♂ Coll. Buena Vista Camp, Lower California, Mexico. E. Heller.
8–16. Adult ♂ Coll. San Felipe, Lower California, Mexico. E. Heller.
17–18. Adult ♀ Coll. San Felipe, Lower California, Mexico. E. Heller.

b. *Perognathus penicillatus pricii* (Allen).

Perognathus pricei Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1894, p. 318.

Perognathus obscurus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1895, p. 216. (nec Merr.)

Perognathus penicillatus pricii Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 253. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 358. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 311. Zoöl. Ser.

PRICE'S POCKET MOUSE.

1–20. Adult ♂ P. Fairbank, Arizona. W. W. Price.
21–25. Adult ♀ P. Fairbank, Arizona. W. W. Price.
26–38. Adult ♂ P. Fort Lowell, Arizona. W. W. Price.
39–46. Adult ♀ P. Fort Lowell, Arizona. W. W. Price.
47–65. Adult ♂ P. S-B. Ranch, Arizona. W. W. Price.
66–67. Adult ♀ P. S-B. Ranch, Arizona. W. W. Price.
68–69. Adult ♂ P. Wilcox, Arizona. W. W. Price.
70–72. Adult ♀ P. Wilcox, Arizona. W. W. Price.
73–78. Adult ♂ Topotypes. P. Oposura, State of Sonora, Mexico. B. C. Condit.
79–80. Adult ♀ Topotypes. P. Oposura, State of Sonora, Mexico. B. C. Condit.
81–83. Adult ♂ P. Cerro Blanco, State of Sonora, Mexico. B. C. Condit.
84–85. Adult ♀ P. Cerro Blanco, State of Sonora, Mexico. B. C. Condit.
86–96. Adult ♂ Coll. San Quentin, Lower California, Mexico. E. Heller.
97–104. Adult ♀ Coll. San Quentin, Lower California, Mexico. E. Heller.

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c. *Perognathus penicillatus arenarius* (Merriam).

Perognathus arenarius Merr., Proc. Cal. Acad. Scien., 2d Ser., IV, 1894, p. 461.

Perognathus penicillatus arenarius Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 358. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 312. Zoöl. Ser.

LITTLE DESERT POCKET MOUSE.

1–14. Adult ♂ Coll. San Felipe, Lower California, Mexico. E. Heller.

15–21. Adult ♀ Coll. San Felipe, Lower California, Mexico. E. Heller.

575. Perognathus helleri Elliot.

Perognathus helleri Elliot, Pub. Field Columb. Mus., III, 1903, p. 166. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 360. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 312. Zoöl. Ser.

HELLER'S POCKET MOUSE.

1–11. Adult ♂ Type and paratypes. Coll. San Quentin, Lower California, Mexico. E. Heller.

12–19. Adult ♀ Paratypes. Coll. San Quentin, Lower California, Mexico. E. Heller.

576. Perognathus stephensi Merriam.

Perognathus stephensi Merr., Proc. Acad. Nat. Scien. Phil., 1894, p. 267. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 253. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 312. Zoöl. Ser.

STEPHENS'S POCKET MOUSE.

1. Adult ♂ Topotype. Coll. Mesquite Valley, Death Valley, California. E. Heller.

2–3. Adult ♀ Topotypes. Coll. Mesquite Valley, Death Valley, California. E. Heller.

577. Perognathus fallax Merriam.

Perognathus fallax Merr., N. Am. Faun., No. I, 1889, p. 19. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 254. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 366. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 314. Zoöl. Ser.

SHORT-EARED CALIFORNIA POCKET MOUSE.

1. Adult ♂ P. Elsinore, California. J. Rowley.

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2. Adult ♂ P. San Diego, California. F. Stephens.
3. Adult ♀ P. Ocean Beach, San Diego, California. F. Stephens.
4–14. Adult ♂ Coll. San Antonio, Lower California, Mexico. E. Heller.
15–23. Adult ♀ Coll. San Antonio, Lower California, Mexico. E. Heller.
24. Adult ♂ Coll. Trinidad, Lower California, Mexico. E. Heller.
25. Adult ♂ Coll. San Matias Spring, Lower California, Mexico. E. Heller.
26–30. Adult ♂ Coll. Ensenada, Lower California, Mexico. E. Heller.
31. Adult ♂ Coll. Juncolito Spring, Lower California, Mexico. E. Heller.
32. Adult ♂ Coll. Head of San Antonio River, Lower California, Mexico. E. Heller.
33–37. Adult ♂ Coll. Rosarito, Lower California, Mexico. E. Heller.
38–43. Adult ♀ Coll. Rosarito, Lower California, Mexico. E. Heller.
44. Adult ♀ Coll. Mattomi, Lower California, Mexico. E. Heller.
45. Adult ♂ Coll. San Quentin, Lower California, Mexico. E. Heller.
46. Adult ♀ Coll. San Quentin, Lower California, Mexico. E. Heller.

a. Perognathus fallax pallidus Mearns.

Perognathus fallax pallidus Mearns, Proc. Biol. Soc. Wash., XIV, 1901, p. 135. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 366. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 314. Zoöl. Ser.

PALLID POCKET MOUSE.

1. Adult ♂ Coll. Whitewater, California. E. Heller.
2–4. Adult ♂ Coll. Morongo Pass, California. E. Heller.
5. Adult ♂ Coll. Warren's Well, California. E. Heller.
6–7. Adult ♂ Coll. Oro Grande, California. E. Heller.
8. Adult ♂ Coll. Victor, California. E. Heller.
9. Adult ♀ Exch. Mountain Spring, California. Am. Mus. Nat. Hist. N. Y. F. X. Holzner.

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10. Adult ♂ Coll. San Matias Spring, Lower California, Mexico. E. Heller.

578. Perognathus femoralis Allen.

Perognathus femoralis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 281. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 254. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 367. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 314. Zoöl. Ser.

GREAT CALIFORNIA POCKET MOUSE.

1. Adult ♂ Exch. Dulzura, California. Am. Mus. Nat. Hist. N. Y. C. H. Marsh.
2. Adult ♂ Exch. Santa Ysabel, California. Am. Mus. Nat. Hist. N. Y. C. H. Marsh.
3. Adult ♀ P. San Ygnacio Valley, California. C. K. Worthern.
4. Adult ♂ P. Santee, San Diego County, California. F. Stephens.

5–6. Adult ♂ Coll. Hanson Lagoon, Hanson Laguna Mts., Lower California, Mexico. E. Heller.

7. Adult ♀ Coll. Hanson Lagoon, Hanson Laguna Mts., Lower California, Mexico. E. Heller.
8. Adult ♂ P. San Diego, California. F. Stephens.

a. Perognathus femoralis mesopolius Elliot.

Perognathus femoralis mesopolius Elliot, Pub. Field Columb. Mus., III, 1903, p. 168. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 367, fig. 68. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 315. Zoöl. Ser.

GRAY POCKET MOUSE.

1–2. Adult ♀ Type and paratype. Coll. Piñon, Lower California, Mexico. E. Heller.

3–4. Adult ♂ Coll. Santa Rosa, Lower California, Mexico. E. Heller.

5–6. Adult ♀ Coll. Santa Rosa, Lower California, Mexico. E. Heller.

7–8. Adult ♂ Coll. Agua de las Fresas, Lower California, Mexico. E. Heller.

9–10. Adult ♀ Coll. Agua de las Fresas, Lower California, Mexico. E. Heller.

11. Adult ♂ Coll. Santa Eulalia, Lower California, Mexico. E. Heller.

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12. Adult ♀ Coll. Santa Eulalia, Lower California, Mexico. E. Heller.
13. Adult ♂ Coll. Agua Escondido, Lower California, Mexico. E. Heller.

579. Perognathus californicus Merriam.

Perognathus californicus Merr., N. Am. Faun., No. 1, 1889, p. 26. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 254. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 315. Zoöl. Ser.

CALIFORNIA POCKET MOUSE.

1. Adult ♂ P. Portola, California. W. W. Price.
2. Adult ♀ P. Portola, California. W. W. Price.

a. Perognathus californicus dispar Osgood.

Perognathus californicus dispar Osgood, N. Am. Faun., No. 18, 1900, p. 58. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 255. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 315. Zoöl. Ser.

ALLEN'S POCKET MOUSE.

1–2. Adult ♂ Coll. Fort Tejon, California. E. Heller.
3. Adult ♂ Coll. Piru Creek, California. E. Heller.
4–5. Adult ♀ Coll. Hot Springs, Mt. Whitney, California. E. Heller.

580. Perognathus spinatus Merriam.

Perognathus spinatus Merr., N. Am. Faun., No. 1, 1889, p. 21. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 255. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 363. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 315. Zoöl. Ser.

SPINY POCKET MOUSE.

1. Adult ♂ P. Vallecitos, San Diego County, California. F. Stephens.
2. Adult ♂ P. San Felipe Cañon, California. F. Stephens.
3–4. Adult ♀ P. San Felipe Cañon, California. F. Stephens.
5. Adult ♂ P. Inwood Well, California. F. Stephens.
6. Adult ♂ P. Borego Springs, California. F. Stephens.
7–10. Adult ♂ Coll. Palm Springs, California. E. Heller.
11–14. Adult ♂ Coll. Cañon Esperanza, Lower California, Mexico. E. Heller.
15–17. Adult ♀ Coll. Cañon Esperanza, Lower California, Mexico. E. Heller.

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18. Adult ♂ Coll. Cañon Diablo, Lower California, Mexico. E. Heller.
19–25. Adult ♂ Coll. San Matias Spring, Lower California, Mexico. E. Heller.
26–27. Adult ♀ Coll. San Matias Spring, Lower California, Mexico. E. Heller.
28–34. Adult ♂ Coll. Mattomi, Lower California, Mexico. E. Heller.
35–37. Adult ♀ Coll. Mattomi, Lower California, Mexico. E. Heller.
38–41. Adult ♂ Coll. Parral, Lower California, Mexico. E. Heller.
42–44. Adult ♀ Coll. Parral, Lower California, Mexico. E. Heller.
45. Adult ♂ Coll. Palomar, Lower California, Mexico. E. Heller.

Genus 157. **Heteromys. Pouched Spiny Rats and Mice.**

Heteromys Desm., Nouv. Dict. Hist. Nat., Mamm., 1817, p. 313. Type *Mus anomalus* Thompson.
Dasynotus Wagl., Nat. Syst. Amph., 1830, p. 21.
Saccomys F. Cuv., Mém. Mus. Hist. Nat. Paris, x, 1823, p. 419.
Xylomys Merr., Proc. Biol. Soc. Wash., xv, 1902, p. 43.
Liomys Merr., Proc. Biol. Soc. Wash., xv, 1902, p. 44.

Subgenus A. **Heteromys.**

581. Heteromys irroratus Gray.
Heteromys irroratus Gray, Proc. Zoöl. Soc., 1868, p. 205. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., iv, Pt. 1, 1904, p. 369. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., vi, 1905, p. 316. Zoöl. Ser.

La Parada Spiny Rat.
1. Adult ♂ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.
2. Adult ♀ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.
3. Juv. ♂ Coll. Lagunas, State of Oaxaca, Mexico. Heller & Barber.

582. Heteromys gaumeri Allen & Chapman.
Heteromys gaumeri Allen & Chapm., Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 9. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., iv, Pt. 1, 1904, p. 371, fig. 69. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., vi, 1905, p. 317. Zoöl. Ser.

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GAUMER'S SPINY RAT.

1. Adult ♂ Pres. Buenavista, Xbac, Yucatan. G. F. Gaumer.

583. Heteromys goldmani Merriam.

Heteromys goldmani Merr., Proc. Biol. Soc. Wash., XV, 1902, p. 41. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 373. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 318. Zoöl. Ser.

GOLDMAN'S SPINY RAT.

1–3. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

4–7. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

Subgenus B. **Liomys.**

584. Heteromys paralius Elliot.

Heteromys paralius Elliot, Pub. Field Columb. Mus., III, 1903, p. 233. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 381. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 320. Zoöl. Ser.

LITTORAL SPINY MOUSE.

1–3. Adult ♂ Type and paratypes. Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.

4–12. Adult ♀ Paratypes. Coll. San Carlos, State of Vera Cruz, Mexico. N. G. Buxton.

585. Heteromys jesupi Allen.

Heteromys jesupi Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1899, p. 201.

JESUP'S SPINY MOUSE.

1. Adult ♂ P. Don Diego, Colombia, South America. H. H. Smith.

2. Juv. ♂ P. Don Diego, Colombia, South America. H. H. Smith.

3. Adult ♀ P. Buritaca, Colombia, South America. H. H. Smith.

586. Heteromys anomalus (Thompson).

Mus anomalus Thomp., Trans. Linn. Soc., XI, 1815, p. 161, pl. X.

THOMPSON'S SPINY MOUSE.

1–2. Adult ♂ Exch. Caura, Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

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3–4. Adult ♀ Exch. Princestown, Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

587. Heteromys albolimbatus Gray.

Heteromys albolimbatus Gray, Proc. Zoöl. Soc., 1868, p. 205. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. 1, 1904, p. 375, fig. 70. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 320. Zoöl. Ser.

GRAY'S SPINY MOUSE.

1. Adult ♂ Coll. Puente de Ixtla, State of Morelos, Mexico. F. E. Lutz.
2. Adult ♀ Coll. Patzcuaro, State of Michoacan, Mexico. F. E. Lutz.

588. Heteromys alleni Coues.

Heteromys alleni Coues, Bull. Mus. Comp. Zoöl., VIII, 1881, p. 187. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 256, fig. 58. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. 1, 1904, p. 376, fig. 100. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 321. Zoöl. Ser.

ALLEN'S SPINY MOUSE.

1. Adult ♂ Coll. Patzcuaro, State of Michoacan, Mexico. F. E. Lutz.

FIG. XXXVII. HETEROMYS ALLENI. ALLEN'S SPINY MOUSE.

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589. Heteromys exiguus Elliot.

Heteromys exiguus Elliot, Pub. Field Columb. Mus., III, 1903, p. 146. Zoöl.Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 377. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 321. Zoöl. Ser.

LITTLE SPINY MOUSE.

1. Adult ♂ Type. Coll. Puente de Ixtla, State of Morelos, Mexico. F. E. Lutz.

a. Heteromys pictus isthmius (Merriam).

Liomys pictus isthmius Merr., Proc. Biol. Soc. Wash., XV, 1902, p. 46.

Heteromys pictus isthmius Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 378. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub.,VI, 1905, p. 322. Zoöl. Ser.

ISTHMIAN SPINY MOUSE.

1–2. Adult ♀ Coll. Lagunas, State of Oaxaca, Mexico. Heller & Barber.

3. Adult ♂ Coll. Lagunas, State of Oaxaca, Mexico. Heller & Barber.

4–5. Adult ♂ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.

6–7. Adult ♀ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.

590. Heteromys texensis (Merriam).

Heteromys alleni Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 256. Zoöl. Ser. (nec Coues.)

Liomys texensis Merr., Proc. Biol. Soc. Wash., XV, 1902, p. 44.

Heteromys texensis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 323. Zoöl. Ser.

TEXAN SPINY MOUSE.

1–2. Adult ♂ Topotypes. P. Brownsville, Texas. C. K. Worthern.

3–4. Adult ♀ Topotypes. P. Brownsville, Texas. C. K. Worthern.

5. Adult ♂ Topotype. Exch. Am. Mus. Nat. Hist. N. Y. F. B. Armstrong.

6. Adult ♀ Topotype. Exch. Am. Mus. Nat. Hist. N. Y. F. B. Armstrong.

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Family X. **Bathyergidæ.**

Genus 158. **Bathyergus.**

Bathyergus Illig., Prodr. Syst. Mamm. et Av., 1811, p. 86. Type *Mus maritimus* Gmelin.

591. Bathyergus maritimus (Gmelin).
Mus maritimus Gmel., Syst. Nat., 1788, p. 140.
Mus suillus Schreb., Säugth., IV, 1792, p. 715.
CAPE OF GOOD HOPE MOLE RAT.
1. Adult ♀ P. Cape of Good Hope, Africa. Ward's Nat. Scien Establ., Rochester, N. Y.

Genus 159. **Georhychus.**

Georychus (sic) Illig., Prodr. Syst. Mamm. et Av., 1811, p. 87. Type *Mus capensis* Pallas.

592. Georhychus capensis (Pallas).
Mus capensis Pall., Nov. Spec. Quad. Glir. Ord., 1777, pp. 72, 172, pl. VII.
CAPE MOLE RAT.
1. Adult — P. South Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 160. **Myoscalops.**

Myoscalops Thos., Proc. Zoöl. Soc., 1890, p. 448. Type *Heliophobius argenteo-cinereus* Peters.
Heliophobius Peters, Berich. Bekannt. geeign. Verhandl. K. Preuss. Akad. Wiss. Berl., 1846, p. 259. (nec Boisduval, 1829, Lepidop.)

593. Myoscalops argenteo-cinereus (Peters).
Heliophobius argenteo-cinereus Peters, Berich. Bekannt. geeign. Verhandl. K. Preuss. Akad. Wiss. Berl., 1846, p. 259.
Georychus! pallidus Gray, Proc. Zoöl. Soc., 1864, p. 124.
SILVER-GRAY MOLE MOUSE.
1. Adult — P. "Cape Colony"? Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

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Genus 161. **Heterocephalus.**

Heterocephalus Rüpp., Mus. Senckenb., III, Heft 2, 1842, pp. 99–101, 175, Taf. VIII, fig. 1, x, figs. 3a–c. Type *Heterocephalus glaber* Rüppell.

594. Heterocephalus philippsi Thomas.

Heterocephalus philippsi Thos., Proc. Zoöl. Soc., 1885, pp. 612, 845, pl. LV, figs. 1–4.

NAKED MOLE MOUSE.

1. Adult ♀ Coll. Mandera, Gerato Pass, Somaliland, East Africa. D. G. Elliot.
2. Adult ♀ Coll. Hullieh, Somaliland, East Africa. D. G. Elliot.

Family XI. **Jaculidæ. Jumping Rats and Mice.**

Subfamily I. **Sicistinæ.**

Genus 162. **Sicista.**

Sicista Gray, in Griff. Anim. Kingd., V, 1827, p. 227. Type *Mus subtilis* Pallas.

Sminthus Nordm., in Demidoff's Voy. Russ. Mérid., III, livr. 1, cah. 1, 1839, pp. 49–51; Atl., tab. 4, fig. 2.

595. Sicista subtilis (Pallas).

Mus subtilis Pall., Reise, II, 1773, p. 705.

Mus vagus Pall., Nov. Spec. Quad. Glir. Ord., II, 1779, p. 327.

Mus betulinus Pall., Nov. Spec. Quad. Glir. Ord., II, 1779, p. 332.

CUNNING JUMPING RAT.

1. Adult — P. Karpathia, South Russia. Ward's Nat. Scien. Establ., Rochester, N. Y.

Subfamily II. **Zapodinæ.**

Genus 163. **Zapus.**

Zapus Coues, Bull. U. S. Geol. Surv. Terr., 2d Ser., I, 1875, p. 253. Type *Dipus hudsonius* Zimmermann.

Dipus Zimm., Geogr. Gesch. Mensch. u. vierfüss. Thiere, II, 1780, p. 358. (Old World species.)

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Gerbillus Rafin., Précis des Découv. Somolog., 1814, p. 14. (nec Desmarest, 1804.)

Meriones F. Cuv., Dents des Mamm., 1823, pp. 187, 256. (nec Illiger, 1811.)

Jaculus Wagl., Nat. Syst. Amphib., 1830, p. 23. (nec Erxleben, 1777.)

Napæozapus Preble, N. Am. Faun., No. 15, 1899, p. 33.

Eozapus Preble, N. Am. Faun., No. 15, 1899, p. 37.

Subgenus A. **Zapus.**

596. Zapus hudsonius (Zimmermann).

Dipus hudsonius Zimm., Geog. Gesch. Mensch. u. vierfüss. Thiere, II, 1780, p. 358.

Dipus labradorius Kerr., Anim. Kingd., 1792, p. 276.

Dipus canadensis Davies, Trans. Linn. Soc. Lond., IV, 1798, p. 157.

Jaculus americanus Wagl., Nat. Syst. Amphib., 1830, p. 23.

Meriones microcephalus Harl., Proc. Zoöl. Soc., 1839, p. 1.

Meriones acadicus Dawson, Edinb. New Philos. Journ., N. S., III, 1856, p. 2.

Zapus hudsonius hardyi Batchelder, Proc. N. Eng. Zoöl. Club, I, 1899, p. 5.

Zapus hudsonius Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 257, fig. 59. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 324. Zoöl. Ser.

HUDSON BAY JUMPING MOUSE.

1. Adult ♂ P. Shelter Island, New York. C. K. Worthern.
2. Adult ♂ Exch. Lawyerville, New York. Am. Mus. Nat. Hist. N. Y. Newell.

3–4. Adult ♂ Coll. Murray Bay, Province of Quebec, Canada. T. Surber.

5. Adult — P. Illinois. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Zapus hudsonius campestris Preble.

Zapus hudsonius campestris Preble, N. Am. Faun., No. 15, 1899, p. 20. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 259. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 325. Zoöl. Ser.

PRAIRIE JUMPING MOUSE.

1–10. Adult ♂ P. Boulder, Colorado. R. T. Young.

11–12. Adult ♀ P. Boulder, Colorado. R. T. Young.

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13. Adult ♂ Coll. Bottineau, North Dakota. W. E. Snyder.
14. Adult ♂ Coll. Jamestown, North Dakota. W. E. Snyder.
15. Adult ♂ Coll. Minot, North Dakota. W. E. Snyder.
16–17. Adult ♀ Coll. Minot, North Dakota. W. E. Snyder.

597. Zapus princeps Allen.

Zapus princeps Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 71. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 260. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 325. Zoöl. Ser.

ROCKY MOUNTAIN JUMPING MOUSE.

1. Adult ♂ Topotype. Exch. Florida, Colorado. Am. Mus. Nat. Hist. N. Y. C. P. Rowley.

a. Zapus princeps minor Preble.

Zapus princeps minor Preble, N. Am. Faun., No. 15, 1899, p. 23. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 260. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 325. Zoöl. Ser.

SASKATCHEWAN JUMPING MOUSE.

1–2. Adult ♂ P. Red Deer, Alberta, Canada. G. F. Dippie.
3–5. Juv. ♂ P. Red Deer, Alberta, Canada. G. F. Dippie.
6–8. Adult ♂ P. Blindman River, Alberta, Canada. G. F. Dippie.
9. Adult ♀ P. Blindman River, Alberta, Canada. G. F. Dippie.
10–11. Adult ♂ P. Nat. Park, Alberta, Canada. G. F. Dippie.

598. Zapus trinotatus Rhoads.

Zapus trinotatus Rhoads, Proc. Acad. Nat. Scien. Phil., 1894, p. 421. Zoöl. Ser. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 261. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 326. Zoöl. Ser.

Zapus imperator Elliot, Pub. Field Columb. Mus., I, 1899, p. 228. Zoöl. Ser.

NORTHWEST JUMPING MOUSE.

1. Adult ♂ P. Carpenter's Mt., Cariboo, British Columbia, Canada. C. K. Worthern.
2. Adult ♀ P. Carpenter's Mt., Cariboo, British Columbia, Canada. C. K. Worthern.
3. Adult ♂ P. Sumas, British Columbia, Canada. C. K. Worthern.
4. Adult ♂ P. Okanagan, British Columbia, Canada. C. K. Worthern.
5–8. Adult ♂ Coll. Johnson's Ranch, Elwah River, Clallam County, Washington. D. G. Elliot.

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9–10. Juv. ♀ Coll. MacDonald's Ranch, Elwah River, Clallam County, Washington. D. G. Elliot.
11–17. Adult ♂ Type and paratypes of *Z. imperator*. Coll. Sieg's Ranch, Elwah River, Clallam County, Washington. D. G. Elliot.
18. Juv. ♂ Coll. Sieg's Ranch, Elwah River, Clallam County, Washington. D. G. Elliot.
19–21. Adult ♂ Coll. Boulder Creek, Elwah River, Clallam County, Washington. D. G. Elliot.
22–23. Adult ♂ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.
24–26. Adult ♀ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.
27–28. Adult ♀ Coll. Boulder Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.
29–32. Adult ♂ Coll. Requa, California. E. Heller.
33–38. Adult ♂ Coll. Eureka, California. E. Heller.
39–42. Adult ♀ Coll. Eureka, California. E. Heller.
43–47. Adult ♂ Coll. Crescent City, California. E. Heller.
48. Adult ♀ Coll. Crescent City, California. E. Heller.
49–50. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
51–52. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.

a. Zapus trinotatus alleni (Elliot).

Zapus alleni Elliot, Pub. Field Columb. Mus., I, 1898, p. 212. Zoöl. Ser.

Zapus trinotatus alleni Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 261. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 326. Zoöl. Ser.

ALLEN'S JUMPING MOUSE.

1–3. Adult ♀ Type and paratypes. P. Pyramid Peak, California. W. W. Price.
4. Adult ♀ P. Blue Lake, California. W. W. Price.
5–6. Adult ♀ P. Silver Lake, California. W. W. Price.
7. Adult ♂ P. Hermit Valley, California. W. W. Price.
8–11. Adult ♀ P. Hermit Valley, California. W. W. Price.
12. Adult ♀ Coll. Mt. Whitney, California. E. Heller.

Subgenus B. **Napæozapus.**

599. Zapus insignis Miller.

Meriones labradorius Dawson, Edinb. New Philos. Journ., N. S., III 1856, p. 2. (nec Kerr.)

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Jaculus hudsonius Baird, N. Am. Mamm., 1857, p. 467. (Part.)
Zapus insignis Miller, Amer. Nat., xxv, 1891, p. 742. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 263, fig. 60. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 328. Zoöl. Ser.

WOODLAND JUMPING MOUSE.

1–2. Adult ♂ Coll. Gravenhurst, Ontario, Canada. L. Kenkel.
3. Adult ♀ Exch. Peterborough, New York. U. S. Nat. Mus. Wash. G. S. Miller, Jr.

Subfamily III. **Jaculinæ. Jerboas.**

Genus 164. **Alactaga.**

Allactaga F. Cuv., Proc. Zoöl. Soc., 1836, pp. 141–142. Type *Dipus alactaga* Olivier=*Mus jaculus* Pallas. (nec Linn.)
Alactaga F. Cuv., Trans. Zoöl. Soc. Lond., II, 1838, p. 133.

600. Alactaga acontion (Pallas).
Dipus acontion Pall., Zoogr. Rosso-Asiat., I, 1811, p. 182.

PALLAS'S JERBOA.

1. Adult — P. South Russia! Ward's Nat. Scien. Establ., Rochester, N. Y.

Family XII. **Pedetidæ.**

Genus 165. **Pedetes.**

Pedetes Illig., Prodr. Syst. Mamm. et Av., 1811, p. 81. Type *Dipus cafer* Gmelin=*Mus cafer* Pallas.
Helamys F. Cuv., Régn. Anim., I, 1817, p. 202. (footnote.)
Lagotis Blainv., Nouv. Dict. Hist. Nat., 2d ed., IX, 1817, p. 284.

601. Pedetes cafer (Pallas).
Mus cafer Pallas, Nov. Spec. Quad. Glir. Ord., 1778, p. 87.
Dipus cafer Schreb, Säugth., IV, 1792, p. 854, pl. 230.
Pedetes caffer A. Smith, Descr. Cat. S. Afric. Mus., 1826, p. 26. Parsons, Proc. Zoöl. Soc., 1898, p. 858. Sclat., Proc. Zoöl. Soc., 1899, p. 428.
Helamys capensis F. Cuv., Hist. Nat. Mamm., 1829, pl.

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Pedetes typicus A. Smith, S. Afr. Quat. Journ., II, 1834, p. 169.
SPRING NAAS.
1. Adult — P. Cape Colony, South Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

Family XIII. **Ctenodactylidæ.**

Genus 166. **Pectinator.**

Pectinator Blyth, Jour. Asiat. Soc. Beng., XXIV, 1856, p. 294. Type *Pectinator spekei* Blyth.

602. Pectinator spekii Blyth.
Pectinator spekei Blyth, Jour. Asiat. Soc. Beng., XXIV, 1856, p. 294, pl. II, figs. 1.
SPEKE'S JUMPING MOUSE.
1. Adult ♂ Coll. Adadleh, Somaliland, East Africa. D. G. Elliot.

Family XIV. **Octodontidæ. The Octodonts.**

Subfamily I. **Octodontinæ.**

Genus 167. **Ctenomys.**

Ctenomys Blainv., Bull. Soc. Philom. Paris, 1826, p. 64. Type *Ctenomys brasiliensis* Blainville.

603. Ctenomys opimus Wagner.
Ctenomys opimus Wagn., Archiv Naturg., I, 1848, p. 75.
Ctenomys brasiliensis Waterh., Nat. Hist. Mamm., II, 1848, p. 273. (nec Blainville.)
BOLIVIAN CTENOMYS.
1. Adult — P. Sajama, Bolivia. E. Gerrard & Sons.

Subfamily II. **Echinomyinæ.**

Genus 168. **Loncheres.**

Loncheres Illig., Prodr. Syst. Mamm. et Av., 1811, p. 90. Type *Hystrix chrysuros!* Schreber=*Myoxus chrysurus* Zimmermann.

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604. Loncheres guianæ Thomas.

Loncheres guianæ Thos., Ann. Mag. Nat. Hist., 6th Ser., II, 1888, p. 326. Allen & Chapm., Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 228.

GUIANA SPINY RAT.

1. Adult ♂ Exch. Caura, Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

Genus 169. **Proechinomys.**

Proëchimys (sic) Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1899, p. 264. Type *Echimys! trinitatis* Allen & Chapman.

605. Proechinomys trinitatis (Allen & Chapman).

Echimys! trinitatis Allen & Chapm., Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 223.

Proëchimys! trinitatis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1899, p. 264.

TRINIDAD SPINY RAT.

1. Adult ♂ Exch. Caparo, Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
2. Adult ♀ Exch. Caparo, Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
3. Adult ♂ Paratype. Exch. Princestown, Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.
4. Adult ♀ Paratype. Exch. Princestown, Trinidad. Am. Mus. Nat. Hist. N. Y. F. M. Chapman.

606. Proechinomys mincæ (Allen).

Echimys! mincæ Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1899, p. 198.

Proëchimys! mincæ Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1899, p. 264.

MINCA SPINY RAT.

1–5. Adult ♂ Paratypes. P. Minca, Colombia, S. A. H. H. Smith.

6–8. Adult ♀ Paratypes. P. Minca, Colombia, S. A. H. H. Smith.

9–10. Juv. — Paratypes. P. Minca, Colombia, S. A. H. H. Smith.

607. Proechinomys canicollis (Allen).

Echimys! canicollis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1899, p. 200.

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Proëchimys! canicollis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1899, p. 264.

GOLDEN-NAPED SPINY RAT.

1–3. Adult ♂ P. Mamatoca, Colombia, South America. H. H. Smith.

4–7. Adult ♀ P. Mamatoca, Colombia, South America. H. H. Smith.

8. Juv. ♀ P. Mamatoca, Colombia, South America. H. H. Smith.

9. Adult ♂ Paratype. P. Bonda, Colombia, South America. H. H. Smith.

10. Adult ♂ P. Santa Marta, Colombia, South America. H. H. Smith.

a. Proechinomys centralis chiriquinus Thomas.

Proechimys! centralis chiriquinus Thos., Ann. Mag. Nat. Hist., 7th Ser., v, 1900, p. 220.

Proechinomys centralis chiriquinus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 387. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 329. Zoöl. Ser.

BOGAVA SPINY RAT.

1–10. Adult ♂ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

11–12. Adult ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

Subfamily III. **Capromyinæ.**

Genus 170. **Myocastor.**

Myocastor Kerr, Anim. Kingd., Mamm., I, Syst. Cat., Nos. 458–521, 1792, pp. 225–226. Type *Mus coypus* Molina.

Myopotamus Geoff., Ann. Mus. Hist. Nat. Paris, VI, 1805, p. 81.

608. Myocastor coypus (Molina).

Mus coypus Molina, Sag. Stor. Nat. Chili, 1782, p. 287.

BEAVER RAT.

1. Adult — P. "Chili." Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 171. **Capromys. Hutias.**

Capromys Desm., Mém. Soc. Hist. Nat. Paris, I, 1822, p. 43. Type *Capromys fournieri* Desmarest=*Isodon pilorides* Say.

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Geocapromys Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1901, p. 314.

Procapromys Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1901, p. 322.

Subgenus A. Capromys.

609. Capromys pilorides (Say).

Isodon pilorides Say, Jour. Acad. Nat. Scien. Phil., II, 1822, p. 333, fig.

Capromys fournieri Desm., Mém. Soc. Hist. Nat. Paris, 1822, p. 43, pl. I.

Capromys quemi Fisch., Syn. Mamm., 1830, Adden., p. 389.

Capromys pilorides Fisch., Syn. Mamm., 1830, Adden., p. 389. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 390, figs. 73, LII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 330. Zoöl. Ser.

HAIRY HUTIA.

1. Adult — Pres. Cuba. C. B. Cory?
2. Adult — P. Cuba. Ward's Nat. Scien. Establ., Rochester, N. Y.

610. Capromys prehensilis Poeppig.

Capromys prehensilis Poeppig, Jour. Acad. Nat. Scien. Phil., 1824, p. 11. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 391. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 331. Zoöl. Ser.

PREHENSILE-TAILED HUTIA.

1. Adult — Pres. Cuba. C. B. Cory?

Subgenus B. Geocapromys.

611. Capromys ingrahami Allen.

Capromys ingrahami Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 329. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 394. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 332. Zoöl. Ser.

INGRAHAM'S HUTIA.

1. Adult — Exch. Plana Keys, Bahamas. Am. Mus. Nat. Hist. N. Y. D. P. Ingraham.

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Genus 172. **Thryonomys.**

Thryonomys Fitzin., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien, LVI, 1867, p. 141. Type *Aulacodus semipalmatus* Heuglin.

Aulacodus Temm., Mon. Mamm., I, 1827, p. 245, pl. XXV. (nec Eschscholtz, 1822, Coleopt.)

Triaulacodus Lydekk., Geog. Hist. Mamm., 1896, pp. 91, 240. (footnote.)

612. Thryonomys swinderenianus (Temminck).

Aulacodus swinderenianus Temm., Monog. Mamm., I, 1827, p. 245, pl. XXV.

CANE RAT.

1. Adult — P. Africa! Ward's Nat. Scien. Establ., Rochester, N. Y.

Family XV. **Erethizontidæ.**

Subfamily I. **Erethizontinæ.**

Genus 173. **Erethizon. Long-spined Porcupines.**

Erethizon F. Cuv., Mém. Mus. Hist. Nat. Paris, IX, 1822, p. 436. Type *Hystrix dorsata* Linnæus.

Echinothrix Brookes, Cat. Anat. & Zoöl. Mus. J. Brookes, Lond., 1828, p. 54.

Echinoprocta Gray, Proc. Zoöl. Soc., 1865, pp. 321–322, desc.

613. Erethizon epixanthum Brandt.

Erethizon epixanthus Brandt, Mém. Acad. Imp. Scien. St. Pétersb., 6th Ser., 1835, p. 390, pls. 1, 9. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 265. Zoöl. Ser.

Erethizon epixanthum Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. 1, 1904, p. 397, figs. 76, LIV. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 332. Zoöl. Ser.

WESTERN PORCUPINE.

1. Adult ♀ Coll. Mt. Whitney, Inyo County, California. E. Heller.
2. Adult — P. California. Ward's Nat. Scien. Establ., Rochester, N. Y.
3. Adult — P. Kansas. Ward's Nat. Scien. Establ., Rochester, N. Y.

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FIG. XXXVIII. ERETHIZON EPIXANTHUM WESTERN PORCUPINE.

614. Erethizon dorsatum (Linnæus).

Hystrix dorsata Linn., Syst. Nat., I, 1758, p. 57; I, 1766, p. 76.

Hystrix pilosus Richards., Faun. Bor. Amer., Mamm., I, 1829, p. 214. (nec Peale.)

Hystrix hudsonius De Kay, Nat. Hist. N. Y., Zoöl., I, 1842, p. 77, pl. VIII, figs. 2 *a*, *b*, *c*, pl. XXVI, fig. 1.

Erethizon dorsatus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 264, pl. XXIV. Zoöl. Ser.

Erethizon dorsatum Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 333. Zoöl. Ser.

CANADIAN TREE PORCUPINE.

1. Adult — P. "Ontario," Canada. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult — P. ——? Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 174. **Coendu.**

Coendou Lacép., Disc. d'ouvert. et de cloture du Cours Hist. Nat., et Tabl. Méthod. des Mamm. et des Oiseaux, Suppl., 1799, p. 11. Type *Hystrix prehensilis* Linnæus.

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Eucritus Fisch., Mém. Soc. Imp. Mosc., v, 1817, pp. 372, 411.
Sinetheres (sic) F. Cuv., Mém. Mus. Hist. Nat. Paris, IX, 1822, p. 433.
Laboura Bilb., Syn. Faun. Scandinav., Mamm., I, 1828, Consp. A.
Cercolabes Brandt, Mamm. Exot. Nov., in Mém. Acad. Imp. St. Pétersb., Sér. 3, III, 1835, p. 55.

615. Coendu mexicanum (Kerr).
Hystrix mexicana Kerr, Anim. Kingd., 1792, p. 214.
Hystrix prehensilis Schreb., Säugth., IV, 1792, p. 603.
Coendu mexicanum Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 402, figs. 77, LV. Zoöl. Ser.

FIG. XXXIX. COENDU MEXICANUM. PREHENSILE-TAILED PORCUPINE.

Id. Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 335. Zoöl. Ser.

PREHENSILE-TAILED PORCUPINE.

1. Adult — P. Venezuela. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♂ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.
3. Adult ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

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Family XVI. **Hystricidæ. Old World Porcupines.**

Subfamily I. **Hystricinæ.**

Genus 175. **Hystrix.**

Hystrix Linn., Syst. Nat., I, 1758, p. 56. Type *Hystrix cristata* Linnæus.

616. Hystrix cristata Linnæus.

Hystrix cristata Linn., Syst. Nat., I, 1758, p. 76.

Acanthion cuvieri Gray, Proc. Zoöl. Soc., 1847, p. 102.

EUROPEAN PORCUPINE.

1. Adult — P. "Europe"! Ward's Nat. Scien. Establ., Rochester, N. Y.

617. Hystrix crassipinis Günther.

Hystrix crassipinis Günth., Proc. Zoöl. Soc., 1876, p. 736, figs. a, b, c. Elliot, Pub. Field Columb. Mus., I, 1896, p. 71. Zoöl. Ser.

LARGE-SPINED PORCUPINE.

1. Adult — P. Borneo. Menage Scientific Exped. Bourns & Worcester.

Genus 176. **Trichys.**

Trichys Günth., Proc. Zoöl. Soc., 1876, p. 739, pl. LXXI, figs. 2, 2a. Type *Trichys lipura* Günther.

618. Trichys lipura Günther.

Trichys lipura Günth., Proc. Zoöl. Soc., 1876, p. 739.

Trichys guentheri Thos., Proc. Zoöl. Soc., 1889, p. 235.

GÜNTHER'S PORCUPINE. *Augkis*, native name.

1. Adult — P. Sibuyan River, Borneo. Ward's Nat. Scien. Establ., Rochester, N. Y.

Family XVII. **Viscaciidæ.**

Genus 177. **Calomys.**

***Callomys**! d'Orb. & I. Geoff., Ann. Sci. Nat. Paris, XXI, 1830, p. 289. Type *Callomys! aureus* d'Orbigny & I. Geoffroy = *Lagidium peruanum* Meyen.

* In 1816 Oken (l. c.) proposed the genus VISCACCIA for the two species, *Lepus chilensis* and *Mus laniger*, the latter, however, excluded by the characters

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Lagidium Meyen, Nov. Act. Acad. Cæs. Leop.-Carol., XVI, Pt. II, 1833, pp. 576–580, tab. XLI, XLII, figs. 1–3, 11.

619. Calomys aureus d'Orbigny & I. Geoffroy.

Callomys! aureus d'Orb. & I. Geoff., Ann. Sci. Nat. Paris, XXI, 1830, p. 291.

Lagidium peruanum Meyen, Nov. Act. Acad. Cæs. Leop.-Carol., XVI, Pt. II, 1833, pp. 576–580, tab. XLI, XLII.

Lagotis cuvieri Bennett, Proc. Zoöl. Soc., 1833, p. 59.

FOUR-TOED VISCACHA.

1. Adult — P. Chili. Ward's Nat. Sci. Establ., Rochester, N. Y.

Genus 178. **Viscacia.**

Viscaccia Oken, Lehrb. d. Naturg., III, 1816, p. 835. Type *Lepus chilensis* Oken=*Dipus maximus* Desmarest.

Viscacia Rafin., Anal. de la Nat., 1815, p. 56. (nomen nudum.)

Lagostomus Brookes, Zoöl. Jour., IV, 1828, p. 133.

620. Viscacia chilensis (Oken).

Lepus chilensis Oken, Lehrb. d. Naturg., III, 1816, p. 835.

Dipus maximus Desm., Nouv. Dict. Hist. Nat., XIII, 1817, p. 117.

Lagostomus trichodactylus Brookes, Zoöl. Jour., IV, 1828, p. 133.

Callomys! viscacia d'Orb. & I. Geoff., Ann. Sci. Nat. Paris, XXI, 1830, p. 291. (nec Molina.)

Lagostomus viscacha Meyen, Nov. Act. Acad. Cæs. Leop.-Carol., XVI, 1833, p. 584.

VISCACHA.

1. Adult — P. Buenos Aires, Argentina, South America. Ward's Nat. Scien. Establ., Rochester, N. Y.

Family XVIII. **Agoutidæ. Agoutis, Paca.**

Genus 179. **Dasyprocta. Agoutis.**

Dasyprocta Illig., Prodr. Syst. Mamm. et Av., 1811, p. 93. Type undetermined.

in his diagnosis. In 1829 this *Mus laniger* was made the type of the genus *Chinchilla* Bennett. Gardens & Menag. Zoöl. Soc., I, p. 1. In 1830 d'Orbigny & I. Geoff., Ann. Scien. Nat. Paris., XXI, p. 289. instituted the genus *Callomys* (sic), including in it *Callomys! viscacia* d'Orb. & Geoff. *Viscacia chilensis*-

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Cutia Liais, Climats, Géol., Faun. et Geog., Botan. Brésil, 1872, p. 534.

Myoprocta Thos., Ann. Mag. Nat. Hist., 7th Ser., XII, 1903, p. 464.

621. Dasyprocta punctata Gray.

Dasyprocta punctata Gray, Ann. Nat. Hist., X, 1842, p. 264. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 405. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 336. Zoöl. Ser.

Dasyprocta aguti Tomes, Proc. Zoöl. Soc., 1861, p. 281. (nec Linn.)

Dasyprocta azaræ Tomes, Proc. Zoöl. Soc., 1861, p. 287. (nec Licht.)

SPOTTED AGOUTI.

1. Adult — Pres. Rio Lagato, Yucatan. C. B. Cory.

622. Dasyprocta mexicana Saussure.

Dasyprocta mexicana Sauss., Rev. Mag. Zool., 2me Sér., XII, 1860, p. 53. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 405, fig. 78. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 336. Zoöl. Ser.

MEXICAN AGOUTI.

1–5. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

6–7. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

623. Dasyprocta coibæ Thomas.

Dasyprocta coibæ Thos., Novitat. Zool., IX, 1902, p. 136. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 407. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 336. Zoöl. Ser.

COIBA AGOUTI.

1–2. Adult ♂ Topotypes. P. Coiba Island, Panama. J. H. Batty.

Mus laniger Molina. and *Callomys! aureus* d'Orb. & Geoff. = *Lagidium peruanum* Meyen, 1833. *Calomys viscacia* = *V. chilensis*, which is the type of its genus, and *Mus laniger* having been made the type of *Chinchilla* there is left but *C. aureus* = *Lagidium peruanum* for the type of *Calomys*, which, having a priority of three years, antedates *Lagidium*.

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624. Dasyprocta aguti (Linnæus).

Mus aguti Linn., Syst. Nat., I, 1766, p. 80.

Dasyprocta aguti Desm., Mamm., 1820, p. 358.

YELLOW-RUMPED AGOUTI.

1. Adult — P. Guiana. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 180. **Agouti. Paca.**

Agouti Lacep., Tabl. Divis. Sous-divis. Ordres et Gen. Mamm., 1799, p. 9. Type *Mus paca* Linnæus.

Cœlogenus (sic) F. Cuv., Ann. Mus. Hist. Nat. Paris, x, 1807, p. 203.

Paca Fisch., Zoogn., III, 1814, p. 85.

Genyscœlus Liais, Climats, Géol., Faun. et Geogr., Botan. Brésil, 1872, p. 537.

625. Agouti paca (Linnæus).

Mus paca Linn., Syst. Nat., I, 1766, p. 81.

THE PACA.

1. Adult — P. South America. Ward's Nat. Scien. Establ., Rochester, N. Y.

Family XIX. **Caviidæ. Cavies.**

Genus 181. **Cavia.**

Cavia Pallas, Misc. Zool., 1766, p. 30. Type *Cavia cobaya* Pallas.

626. Cavia aperea Erxleben.

Cavia aperea Erxleb., Syst. Reg. Anim., 1777, p. 348.

Cavia leucopyga Brandt, Mém. Acad. Sci. St. Pétersb., III, 1835, p. 436, pl. 16.

ERXLEBEN'S CAVY.

1. Adult — P. Brazil. Ward's Nat. Scien. Establ., Rochester, N. Y.

627. Cavia porcellus (Linnæus).

Mus porcellus Linn., Syst. Nat., I, 1758, p. 59; I, 1766, p. 79.

RESTLESS CAVY.

1. Adult — P. No locality. Ward's Nat. Scien. Establ., Rochester, N. Y.

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Genus 182. **Hydrochœrus.**

Hydrochœrus Brisson, Regn. Anim., 2d ed., 1762, pp. 12, 80–81. Type *Hydrochœrus hydrochœrus* Brisson = *Sus hydrochœris!* Linnæus.

628. Hydrochœrus hydrochœrus (Linnæus).

Sus hydrochœris! Linn., Syst. Nat., I, 1766, p. 103.

Hydrochœrus capybara Erxleben, Syst. Regn. Anim., 1777, p. 193. Wagn., Schreb. Säugth., Suppl., IV, 1844, p. 56, pl. 174. Tschudi, Faun. Peru., 1844, p. 194. Waterh., Mamm., II, 1848, p. 201, pl. 5, fig. 2. Flower, Proc. Zoöl. Soc., 1884, p. 252.

CAPYBARA WATER-HOG.

1. Adult — P. South America! Ward's Nat. Scien. Establ., Rochester, N. Y.

SUBORDER II. DUPLICIDENTATA.

Family XX. **Ochotonidæ.**

Genus 183. **Ochotona. Pikas, Chief Hares.**

Ochotona Link, Zool. Beitr. Naturg., I, Pt. II, 1795, p. 74. Type undetermined.

Lagomys Storr, Prodr. Meth. Mamm., 1780, pp. 39–40, tab. B.

Ogotoma Gray, Ann. Mag. Nat. Hist., 3d Ser., XX, 1867, p. 220.

629. Ochotona princeps (Richardson).

Lepus princeps Richards., Zoöl. Jour., III, 1828, p. 520.

Ochotona princeps Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 267, fig. 61. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 338. Zoöl. Ser.

CHIEF PIKA.

1–2. Adult ♀ P. Canadian Nat. Park, Alberta, Canada. G. F. Dippie.
3–6. Adult ♂ P. Canadian Nat. Park, Alberta, Canada. G. F. Dippie.
7–8. Adult ♂ P. Banff, Alberta, Canada. G. F. Dippie.
9–10. Adult ♀ P. Banff, Alberta, Canada. G. F. Dippie.

630. Ochotona schisticeps (Merriam).

Lagomys schisticeps Merr., N. Am. Faun., No. 2, 1889, p. 11.

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Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 341. Zoöl. Ser.

WANDERING SWAMP HARE.

1. Adult ♂ Type. Coll. Dougherty, Indian Territory. T. Surber.
2. Adult ♀ Paratype. Coll. Dougherty, Indian Territory. T. Surber.

635. Lepus truii Allen.

Lepus truei Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 192.

Lepus truii Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 415. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 341. Zoöl. Ser.

TRUE'S SWAMP HARE.

1. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

Subgenus B. **Sylvilagus. Forest Hares.**

636. Lepus floridanus (Allen).

Lepus sylvaticus floridanus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 160.

Lepus floridanus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 280, pl. XXVI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 342. Zoöl. Ser.

FLORIDA COTTON-TAIL.

1. Adult ♂ Coll. Micco, Florida. T. Surber.
2–3. Juv. — Coll. Enterprise, Florida. T. Surber.

a. Lepus floridanus mallurus (Thomas).

Lepus sylvaticus Bachm., Jour. Acad. Nat. Scien. Phil., 1837, p. 403. (nec Nillson.)

Lepus nuttalli mallurus Thos., Ann. Mag. Nat. Hist., 7th Ser., II, 1898, p. 320.

Lepus floridanus mallurus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 280. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 342. Zoöl. Ser.

COMMON COTTON-TAIL.

1. Adult ♀ Pres. Laporte, Indiana. C. M. Barber.
2–4. Adult ♂ P. White Sulphur Springs, West Virginia. T. Surber.
5. Adult ♂ Coll. Apex, North Carolina. T. Surber.

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6. Adult ♂ Coll. Gainesville, Florida. T. Surber.
7. Adult ♂ Coll. Enterprise, Florida. T. Surber.
8. Adult ♀ Coll. Enterprise, Florida. T. Surber.
9. Adult ♂ Pres. Hicksville, Ohio. S. E. Meek.
10. Adult — Pres. Hicksville, Ohio. S. E. Meek.
11–17. Adult ♂ P. Lawrence, Kansas. J. Rowley.
18–22. Adult ♀ P. Lawrence, Kansas. J. Rowley.
23. Adult — P. Raleigh, North Carolina. Ward's Nat. Scien. Establ., Rochester, N. Y.
24. Adult — Coll. Fox Lake, Illinois. L. Pray.

b. Lepus floridanus mearnsi (Allen).

Lepus sylvaticus mearnsii Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1894, p. 171.

Lepus floridanus mearnsi Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1899, p. 13. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 280. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 342. Zoöl. Ser.

MEARNS'S COTTON-TAIL.

1–2. Adult ♂ P. Knoxville, Iowa. G. K. Cherrie.
3–5. Adult ♀ P. Knoxville, Iowa. G. K. Cherrie.
6. Adult ♀ Exch. Toronto, Ontario, Canada. Am. Mus. Nat. Hist. N. Y. E. S. Thompson.
7–8. Adult ♀ P. Dickinson, Dakota. G. K. Cherrie.
9. Adult ♂ Topotype. Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
10. Adult ♂ Pres. Beaver Dam, Wisconsin. W. E. Snyder.

c. Lepus floridanus transitionalis (Bangs).

Lepus sylvaticus transitionalis Bangs, Proc. Bost. Soc. Nat. Hist., 1895, p. 405.

Lepus floridanus transitionalis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 281. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 342. Zoöl. Ser.

BANGS'S COTTON-TAIL.

1. Adult ♂ P. White Sulphur Springs, West Virginia. T. Surber.

d. Lepus floridanus alacer (Bangs).

Lepus sylvaticus alacer Bangs, Proc. Biol. Soc. Wash., X, 1896, p. 136.

Lepus floridanus alacer Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 282. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 343. Zoöl. Ser.

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Lepus auduboni sanctidiegi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 283. Zoöl. Ser.

Lepus sanctidiegi Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 422. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 345. Zoöl. Ser.

SAN DIEGO COTTON-TAIL.

1–2. Adult ♂ Coll. El Alamo, Lower California, Mexico. E. Heller.
3–5. Adult ♀ Coll. El Alamo, Lower California, Mexico. E. Heller.
6. Adult ♂ Coll. San Tomas, Lower California, Mexico. E. Heller.
7–11. Adult ♂ P. Elsinore, California. J. Rowley.
12. Adult ♀ P. Elsinore, California. J. Rowley.
13. Adult ♂ P. Los Angeles, California. J. Rowley.
14. Adult ♀ P. Los Angeles, California. J. Rowley.
15. Adult ♀ Exch. Dulzura, California. Am. Mus. Nat. Hist. N. Y. C. H. Marsh.
16. Adult ♂ Coll. Sabinas, State of Coahuila, Mexico. Heller & Barber.
17. Adult ♀ Coll. Sabinas, State of Coahuila, Mexico. Heller & Barber.

638. Lepus laticinctus Elliot.

Lepus laticinctus Elliot, Pub. Field Columb. Mus., III, 1903, p. 254. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 346. Zoöl. Ser.

BROAD-BANDED COTTON-TAIL.

1–3. Adult ♂ Coll. Fort Tejon, California. E. Heller.
4–5. Adult ♀ Coll. Fort Tejon, California. E. Heller.
6–9. Adult ♂ Type and paratypes. Coll. Oro Grande, California. E. Heller.
10. Adult ♀ Paratype. Coll. Oro Grande, California. E. Heller.
11. Adult ♂ Coll. Lone Pine, Inyo County, California. E. Heller.

a. Lepus laticinctus rufipes Elliot.

Lepus laticinctus rufipes Elliot, Pub. Field Columb. Mus., III, 1903, p. 254. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 346. Zoöl. Ser.

RUSSET-FOOTED COTTON-TAIL.

1–6. Adult ♂ Type and paratypes. Coll. Furnace Creek, Death Valley, California. E. Heller.

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7–9. Adult ♀ Paratypes. Coll. Furnace Creek, Death Valley, California. E. Heller.

b. Lepus laticinctus perplicatus Elliot.

Lepus laticinctus perplicatus Elliot, Pub. Field Columb. Mus., III, 1903, p. 255. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 347. Zoöl. Ser.

MIXED COTTON-TAIL.

1. Adult ♂ Type. Coll. Hannopee Cañon, Panamint Mountains, California. E. Heller.
2–5. Adult ♀ Coll. Bryan Mine, Coso Mountains, California. E. Heller.
6. Juv. ♂ Coll. Hot Springs, Mt. Whitney, California. E. Heller.
7. Adult ♀ Coll. Inyo Mts., summits E. of Lone Pine, California. E. Heller.

639. Lepus veræcrucis Thomas.

Lepus veræcrucis Thomas, Proc. Zoöl. Soc., 1890, p. 74, pl. VII. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 420. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 347. Zoöl. Ser.

VERA CRUZ COTTON-TAIL.

1–2. Adult ♀ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber.
3–4. Juv. ♀ Coll. Mt. Orizaba, State of Vera Cruz, Mexico. Heller & Barber.
5. Juv. ♂ Coll. Esperanza, State of Puebla, Mexico. Heller & Barber.

640. Lepus insolitus Allen.

Lepus insolitus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 189. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 421. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 348. Zoöl. Ser.

PLAINS COTTON-TAIL.

1–2. Adult ♂ P. Mazatlan, State of Sinaloa, Mexico. A. Forrer.
3–5. Adult ♀ P. Mazatlan, State of Sinaloa, Mexico. A. Forrer.
6. Adult — P. Mazatlan, State of Sinaloa, Mexico. A. Forrer.
7. Juv. — P. Mazatlan, State of Sinaloa, Mexico. A. Forrer.

641. Lepus superciliaris Allen.

Lepus (*Sylvilagus*) *superciliaris* Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1899, p. 196.

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Sylvilagus superciliaris Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1904, p. 445.

BONDA COTTON-TAIL.

1–2. Adult ♂ Paratypes. P. Bonda, Colombia, South America. H. H. Smith.

3–6. Adult ♀ Paratypes. P. Bonda, Colombia, South America. H. H. Smith.

642. Lepus nuttalli Bachman.

Lepus nuttalli Bachm., Jour. Acad. Nat. Scien. Phil., 1837, p. 345, pl. 22. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 284. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 425. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 348. Zoöl. Ser.

NUTTALL'S COTTON-TAIL.

1. Adult ♂ P. Alberta, Canada. G. F. Dippie.
2. Adult ♂ Coll. Jamestown, North Dakota. W. E. Snyder.
3. Adult ♀ Exch. Indian Reservation, Utah. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

4–7. Adult ♂ P. Rockvale, Colorado. C. K. Mason.

8. Adult ♀ P. Rockvale, Colorado. C. K. Mason.
9. Adult — P. Quenda, Colorado. C. K. Mason.
10. Adult ♀ P. Greenhorn Mts., Colorado. C. K. Mason.
11. Adult — P. Fremont County, Colorado. C. K. Mason.

643. Lepus baileyi Merriam.

Lepus baileyi Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 148 Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 284. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 349. Zoöl. Ser.

BAILEY'S COTTON-TAIL.

1. Adult ♂ P. Billings, Montana. E. S. Thompson.
2. Adult ♀ P. Billings, Montana. E. S. Thompson.

644. Lepus grangeri (Allen).

Lepus sylvaticus grangeri Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1895, p. 264.

Lepus grangeri Allen, Bull. Am. Mus. Nat. Hist. N.Y., 1896, p. 246. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 285. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 349. Zoöl. Ser.

GRANGER'S COTTON-TAIL.

1. Adult ♂ Exch. Battle Creek, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

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2. Juv. ♂ Exch. Cheyenne Reservation, South Dakota. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

645. Lepus arizonæ (Allen).

Lepus sylvaticus var. *arizonæ* Allen, N. Am. Rod., 1877, p. 332.

Lepus arizonæ Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 285. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 423. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 349. Zoöl. Ser.

ARIZONA COTTON-TAIL.

1. Adult ♂ P. S-B. Ranch, Arizona. W. W. Price.
2–4. Adult ♀ P. S-B. Ranch, Arizona. W. W. Price.
5. Adult ♀ P. Fairbank, Arizona. W. W. Price.
6–7. Adult ♂ P. Fort Lowell, Arizona. W. W. Price.
8–10. Adult ♀ P. Fort Lowell, Arizona. W. W. Price.
11. Adult — P. Fort Lowell, Arizona. W. W. Price.
12–13. Adult ♀ P. Mt. Siegel, Nevada. W. W. Price.
14. Juv. ♀ P. Mt. Siegel, Nevada. W. W. Price.
15. Adult ♂ P. Anderson's Ranch, Nevada. W. W. Price.
16. Juv. ♂ P. Anderson's Ranch, Nevada. W. W. Price.
17–18. Adult ♀ P. Anderson's Ranch, Nevada. W. W. Price.
19. Juv. ♀ P. Huachuca Mts., Arizona. W. W. Price.
20–21. Juv. ♀ P. Chiricahua Mts., Arizona. W. W. Price.

a. Lepus arizonæ pinetis (Allen).

Lepus sylvaticus pinetis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1894, p. 348.

Lepus grangeri pinetis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 285. Zoöl. Ser.

Lepus arizonæ pinetis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 350. Zoöl. Ser.

PINE WOOD COTTON-TAIL.

1–2. Adult ♂ P. Boulder, Colorado. R. T. Young.

b. Lepus arizonæ major Mearns.

Lepus arizonæ major Mearns, Proc. U. S. Nat. Mus., 1896, p. 557. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 286. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 423. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 350. Zoöl. Ser.

GREATER DESERT COTTON-TAIL.

1. Adult ♂ Exch. Fort Verde, Yavapai County, Arizona. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

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2. Adult ♀ P. Cerro Blanco, State of Sonora, Mexico. J. Rowley.

c. Lepus arizonæ minor Mearns.

Lepus arizonæ minor Mearns, Proc. U. S. Nat. Mus., 1896, p. 557. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 286. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 423. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 350. Zoöl. Ser.

LESSER DESERT COTTON-TAIL.

1. Adult ♀ Exch. Colorado Springs, Colorado. Am. Mus. Nat. Hist. N. Y. C. A. Smith.

646. Lepus graysoni Allen.

Lepus graysoni Allen, N. Am. Rod., 1777, p. 347. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 426. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 351. Zoöl. Ser.

GRAYSON'S COTTON-TAIL.

1–2. Adult ♀ P. Tres Marias Islands, Mexico. A. Forrer.

Subgenus C. **Microlagus. Short-tailed Hares.**

647. Lepus bachmani Waterhouse.

Lepus bachmani Waterh., Proc. Zoöl. Soc., 1838, p. 103. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 429. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 352. Zoöl. Ser.

Lepus trowbridgii Baird, Journ. Acad. Nat. Scien. Phil., 1855, p. 333.

Lepus floridanus bachmani Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 281. Zoöl. Ser.

BACHMAN'S COTTON-TAIL.

1. Adult ♂ P. Portola, California. W. W. Price.
2. Adult ♀ P. Portola, California. W. W. Price.
3–4. Adult ♂ P. Alum Rock Park, California. W. W. Price.
5–6. Adult ♀ P. Alum Rock Park, California. W. W. Price.
7. Adult ♂ P. Mt. Hamilton, California. W. W. Price.
8–9. Adult ♀ P. Mt. Hamilton, California. W. W. Price.
10. Juv. ♀ P. Mt. Hamilton, California. W. W. Price.
11. Adult ♂ P. Snow Mts., California. W. W. Price.
12. Adult ♀ P. Carmel River, California. W. W. Price.
13–14. Adult ♂ Coll. Nicasio, California. E. Heller.

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15. Adult ♀ Coll. Nicasio, California. E. Heller.
16–17. Adult ♂ Coll. Petaluma, California. E. Heller.
18. Adult ♂ Coll. Mendocino, California. E. Heller.
19. Adult ♂ Coll. Point Reyes, California. E. Heller.
20–21. Adult ♂ Coll. Eureka, California. E. Heller.
22. Adult ♀ Coll. Eureka, California. E. Heller.
23. Adult ♂ P. Corpus Christi, Texas. G. K. Cherrie.
24. Adult ♀ P. Corpus Christi, Texas. G. K. Cherrie.
25–26. Juv. ♀ P. Big Trees, Santa Cruz, California. C. K. Worthern.

a. Lepus bachmani ubericolor Miller.

Lepus bachmani ubericolor Miller, Proc. Acad. Nat. Scien. Phil., 1899, p. 383. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 352. Zoöl. Ser.

Lepus floridanus ubericolor Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 282. Zoöl. Ser.

RICH-COLORED COTTON-TAIL.

1–2. Adult ♂ Coll. Requa, California. E. Heller.
3–6. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
7. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.
8–10. Adult ♂ Coll. Florence, Oregon. E. Heller.
11–14. Adult ♀ Coll. Florence, Oregon. E. Heller.
15. Adult ♂ Topotype. Coll. Beaverton, Oregon. E. Heller.
16–19. Adult ♀ Topotypes. Coll. Beaverton, Oregon. E. Heller.

648. Lepus cinerascens Allen.

Lepus cinerascens Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 159. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 287, pl. XXVII. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 429, fig. 82. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 352. Zoöl. Ser.

ASH-COLORED COTTON-TAIL.

1–2. Adult ♂ Coll. Rosarito, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
3–7. Adult ♀ Coll. Rosarito, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
8. Adult ♂ Coll. St. Eulalia, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
9. Adult ♀ Coll. Trinidad, San Pedro Martir Mts., Lower California, Mexico. E. Heller.
10. Adult ♀ Coll. Salado River Cañon, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

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11–13. Adult ♂ Coll. San Quentin, Lower California, Mexico. E. Heller.
14–18. Adult ♀ Coll. San Quentin, Lower California, Mexico. E. Heller.
19. Juv. ♂ P. San Antonio, California. W. W. Price.
20–22. Juv. ♀ P. San Antonio, California. W. W. Price.

649. Lepus peninsularis Allen.

Lepus peninsularis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1898. p. 144. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 430. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 353. Zoöl. Ser.

LOWER CALIFORNIA COTTON-TAIL.

1. Adult ♀ P. La Paz, Lower California, Mexico. A. Forrer.

Subgenus D. **Oryctolagus.**

650. Lepus cuniculus Linnæus.

Lepus cuniculus Linn., Syst. Nat., I, 1766, p. 77. Waterhouse, Mamm., II, 1848, p. 64.

EUROPEAN RABBIT.

1. Adult ♀ P. Brunswick, Germany. J. A. Loring.

Subgenus E. **Macrotolagus. Jack Rabbits.**

651. Lepus alleni Mearns.

Lepus alleni Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p.

FIG. XL. LEPUS ALLENI. ALLEN'S JACK RABBIT.

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294. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 288. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 433, fig. LVIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 353. Zoöl. Ser.

ALLEN'S JACK RABBIT.

1–3. Adult ♂ P. Fort Lowell, Arizona. W. W. Price.

4–6. Adult ♀ P. Fort Lowell, Arizona. W. W. Price.

7–8. Adult ♂ P. Cerro Blanco, State of Sonora, Mexico. J. Rowley.

9–10. Adult ♀ P. Cerro Blanco, State of Sonora, Mexico. J. Rowley.

652. Lepus callotis Wagler.

Lepus callotis Wagl., Nat. Syst. Amph., 1830, p. 23. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 288. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 431. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 353. Zoöl. Ser.

Lepus nigricaudatus Bennett, Proc. Zoöl. Soc., 1833, p. 41.

Lepus mexicanus Rich., 6th Rep. Brit. Assoc., 1837, p. 150.

BEAUTIFUL-EARED JACK RABBIT.

1. Adult — Coll. Puebla, State of Puebla, Mexico. F. E. Lutz.

a. Lepus callotis flavigularis (Wagner).

Lepus flavigularis Wagn., Schreb. Säugth., Suppl., IV, 1844, p. 107.

Lepus callotis flavigularis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 353, Syn. *L. callotis;* Appendix, p. 543. Zoöl. Ser.

YELLOW-THROATED JACK RABBIT.

1–10. Adult ♂ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.

11–13. Adult ♀ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.

653. Lepus merriami Mearns.

Lepus texianus! Aud. & Bachm., Quad. N. Am., III, 1853, p. 156, pl. CXXXIII. (nec Waterhouse.)

Lepus merriami Mearns, Proc. U. S. Nat. Mus., 1896, p. 444. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 289, pl. XXVII. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 432. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 354. Zoöl. Ser.

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MERRIAM'S JACK RABBIT.

1–3. Adult ♀ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

4. Adult — Coll. Sabinas, State of Coahuila, Mexico. Heller & Barber.

654. Lepus melanotis Mearns.

Lepus melanotis Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 297. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 290. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 355. Zoöl. Ser.

BLACK-EARED JACK RABBIT.

1. Adult ♂ Coll. White Horse Spring, Oklahoma Territory. T. Surber.

2. Adult ♂ Exch. Long Island, Kansas. Am. Mus. Nat. Hist. N. Y. W. W. Granger.

3. Adult ♂ P. Lawrence, Kansas. J. Rowley.

4. Adult ♀ P. Lawrence, Kansas. J. Rowley.

a. Lepus texensis eremicus (Allen).

Lepus texianus! eremicus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1894, p. 347.

Lepus texensis eremicus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 291. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 435, pl. XLI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 355. Zoöl. Ser.

DESERT JACK RABBIT.

1. Adult ♂ P. Fort Lowell, Arizona. Loye Miller.

2. Adult ♀ P. Fort Lowell, Arizona. Loye Miller.

3. Adult ♂ Paratype. P. Fairbank, Arizona. W. W. Price.

4. Adult ♀ Paratype. P. Fairbank, Arizona. W. W. Price.

5. Adult ♂ Exch. Neutral Strip, Indian Territory. Am. Mus. Nat. Hist. N. Y. Richardson & Rowley.

b. Lepus texensis deserticola (Mearns).

Lepus texianus! deserticola Mearns, Proc. U. S. Nat. Mus., 1896, p. 564.

Lepus texensis deserticola Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 291. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 437. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 356. Zoöl. Ser.

WESTERN DESERT JACK RABBIT.

1. Adult ♂ Coll. Phœnix, Arizona. G. F. Breninger.

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2. Adult ♀ Coll. Phœnix, Arizona. G. F. Breninger.
3. Adult ♂ Coll. Whitewater, California. E. Heller.
4. Adult ♂ Coll. Copper City, California. E. Heller.
5. Adult ♀ Coll. Lone Pine, Inyo County, California. E. Heller.
6. Adult ♂ Coll. Coal Kilns, Panamint Mts., California. E. Heller.
7–8. Adult ♂ Coll. Cañon Esperanza, Lower California, Mexico. E. Heller.
9. Adult ♂ Coll. San Felipe, Lower California, Mexico. E. Heller.
10. Adult ♀ Coll. San Felipe, Lower California, Mexico. E. Heller.

655. Lepus californicus Gray.

Lepus californica Gray, Charlesw. Mag. Nat. Hist., I, 1837, p. 586.
Lepus californicus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 291. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 437. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 357. Zoöl. Ser.

California Jack Rabbit.

1. Adult ♂ Exch. Laguna Mts., California. Am. Mus. Nat. Hist. N. Y. F. X. Holzner.
2–3. Juv. ♂ P. Snow Mountains, California. W. W. Price.
4–5. Adult ♂ P. Elsinore, California. J. Rowley.
6–8. Adult ♀ P. Elsinore, California. J. Rowley.
9. Adult ♂ P. Upper Klamath Lake, Oregon. A. Forrer.
10–11. Adult ♀ P. Upper Klamath Lake, Oregon. A. Forrer.
12. Adult ♀ Coll. Trinidad, Lower California, Mexico. E. Heller.
13. Adult ♂ Coll. Parral, Lower California, Mexico. E. Heller.
14. Adult ♀ Coll. Parral, Lower California, Mexico. E. Heller.
15. Adult ♂ Coll. San Quentin, Lower California, Mexico. E. Heller.
16–17. Adult ♀ Coll. San Quentin, Lower California, Mexico. E. Heller.
18. Adult — P. Point Reyes, California. Ward's Nat. Scien. Establ., Rochester, N. Y.
19. Juv. ♂ P. Folsom City, California. A. Forrer.

a. Lepus californicus xanti Thomas.

Lepus californicus xanti Thomas, Ann. Mag. Nat. Hist., 7th Ser., I, 1898, p. 45. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 438. Zoöl. Ser. *Id.* Check-L.

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Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 357. Zoöl. Ser.

LOWER CALIFORNIA JACK RABBIT.

1. Adult ♂ P. La Paz, Lower California, Mexico. A. Forrer.
2. Adult ♀ P. La Paz, Lower California, Mexico. A. Forrer.

656. Lepus martirensis Stowell.

Lepus martirensis Stowell, Proc. Calif. Acad. Scien., 2d Ser., V, 1895, p. 51. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. I, 1904, p. 439. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 358. Zoöl. Ser.

SAN PEDRO MARTIR JACK RABBIT.

1-2. Adult ♂ Coll. Santa Eulalia, Lower California, Mexico. E. Heller.
3-4. Adult ♀ Coll. Santa Eulalia, Lower California, Mexico. E. Heller.
5. Adult ♀ Coll. Rosarito, Lower California, Mexico. E. Heller.

Subgenus F. **Lepus. Changeable Hares.**

657. Lepus europaeus Pallas.

Lepus europæus Pall., Nov. Spec. Quad. Glir. Ord., 1778, p. 30.
Lepus timidus Schreb., Säugth., IV, 1792, pl. 233. (nec Linn.)

EUROPEAN HARE.

1. Adult — P. Germany. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult — P. Switzerland. Ward's Nat. Scien. Establ., Rochester, N. Y.
3. Adult ♂ P. Brunswick, Germany. J. A. Loring.
4. Adult ♀ P. Brunswick, Germany. J. A. Loring.
5-6. Adult — P. Brunswick, Germany. J. A. Loring.
7-8. Adult — P. Europe. C. K. Worthern.

658. Lepus somalensis Heuglin.

Lepus somalensis Heugl., Nov. Act. Acad. Cæs. Leop.-Carol., XXVIII, 1861, p. 5.

SOMALI HARE.

1. Adult — Coll. Silo Plain, Haud, Somaliland, E. Africa. D. G. Elliot.
2. Juv. — Coll. Silo Plain, Haud, Somaliland, E. Africa. D. G. Elliot.

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659. Lepus arcticus Ross.

Lepus arcticus Ross, Voy. Arct. Reg., II, 1819, Append. IV, p. 151. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 270. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 358. Zoöl. Ser.

Lepus glacialis Leach, in Ross's Voy. Arct. Reg., II, 1819, Append. IV, p. 170.

Lepus timidus var. *arcticus* Allen, Mon. N. Am. Rod., 1877, p. 288.

POLAR HARE.

1–2. Adult ♂ P. Calgary, Alberta, Canada. G. F. Dippie.
3. Adult ♂ P. Pine Creek, Alberta, Canada. G. F. Dippie.
4. Adult ♀ P. Carmen, Manitoba, Canada. G. F. Dippie.

660. Lepus grœnlandicus Rhoads.

Lepus grœnlandicus Rhoads, Amer. Nat., XXX, 1896, p. 236. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 271. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 359. Zoöl. Ser.

GREENLAND HARE.

1–2. Adult ♂ P. Bache Peninsula, Greenland. S. Warmbath.
3–4. Adult ♀ P. Bache Peninsula, Greenland. S. Warmbath.

661. Lepus americanus Erxleben.

Lepus americanus Erxl., Syst. Reg. Anim., I, 1777, p. 330. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 273. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 360. Zoöl. Ser.

Lepus hudsonius Pall., Nov. Spec. Quad. Glir. Ord., 1778, p. 30.

Lepus nanus Schreb., Säugth., IV, 1792, p. 881, pl. 234B.

Lepus borealis Schinz, Synop., II, 1845, p. 286.

Lepus campestris Hayden, Amer. Nat., III, 1869, p. 115. (Part.)

AMERICAN HARE.

1. Adult ♂ Exch. Sherburne, Vermont. Am. Mus. Nat. Hist. N. Y.
2. Adult ♂ P. Orillia, Ontario, Canada. G. F. Dippie.
3. Adult ♀ Exch. Andover, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. J. Rowley.
4. Adult ♂ Exch. Andover, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. A. Lockwood.
5. Adult ♂ P. Red Deer River, Alberta, Canada. G. F. Dippie.
6. Adult ♂ P. Calgary, Alberta, Canada. G. F. Dippie.
7. Adult ♂ Coll. Park Siding, Michigan. C. Brandler.
8. Adult ♀ Coll. Park Siding, Michigan. C. Brandler.

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9. Adult — P. Wyoming. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Lepus americanus phæonotus Allen.

Lepus americanus phæonotus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1899, p. 11. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 273. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 360. Zoöl. Ser.

WESTERN HARE.

1. Adult ♂ P. Minnesota.

b. Lepus americanus bairdi (Hayden).

Lepus bairdii Hayden, Amer. Nat., III, 1869, p. 115.

Lepus americanus bairdi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 274. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 361.

BAIRD'S HARE.

1. Adult ♂ P. Eagle County, Montana. E. S. Thompson.
2. Adult ♂ P. Silver Lake Mine, Boulder County, Colorado. R. T. Young.

3–4. Adult ♀ P. Silver Lake Mine, Boulder County, Colorado. R. T. Young.

c. Lepus americanus washingtoni (Baird).

Lepus washingtonii Baird, Proc. Acad. Nat. Scien. Phil., 1855, p. 333, pl. 15.

Lepus americanus washingtoni Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 274. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 361. Zoöl. Ser.

WASHINGTON HARE.

1. Adult — Coll. Johnson's Ranch, Elwah River, Clallam County, Washington. D. G. Elliot.
2. Adult — Coll. Boulder Creek, Elwah River, Clallam County, Washington. D. G. Elliot.

3–6. Juv. ♀ Coll. Boulder Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

7. Adult ♂ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

8–10. Adult ♀ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

11. Juv. ♂ Coll. Boulder Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

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662. Lepus campestris Bachman.

Lepus campestris Bachm., Jour. Acad. Nat. Scien. Phil., 1837, p. 349. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 277. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 362. Zoöl. Ser.

PLAINS HARE.

1. Adult ♀ Coll. Braddock, North Dakota. W. E. Snyder.
2. Adult ♀ P. Gardiner, Montana. E. S. Thompson.
3–4. Adult ♀ Exch. Perch, Nebraska. Am. Mus. Nat. Hist. N. Y. W. W. Granger.
5. Adult — P. "Kansas." Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Lepus campestris townsendi (Bachman).

Lepus townsendi Bachm., Jour. Acad. Nat. Scien. Phil., 1839, p. 90.

Lepus campestris townsendi Merr., Proc. Biol. Soc. Wash., XVII, 1904, p. 132. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 363. Zoöl. Ser.

TOWNSEND'S HARE.

1. Adult ♂ P. Upper Klamath Lake, Oregon. A. Forrer.
2–4. Adult ♀ P. Upper Klamath Lake, Oregon. A. Forrer.

b. Lepus campestris sierræ Merriam.

Lepus campestris sierræ Merr., Proc. Biol. Soc. Wash., XVII, 1904, p. 132. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 363. Zoöl. Ser.

SIERRA HARE.

1. Adult ♀ Coll. Mt. Whitney, California. E. Heller.

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Order VII. **Carnivora. Carnivoros.**

Family I. **Felidæ. Cats.**

Genus 185. **Felis.**

Felis Linn., Syst. Nat., I, 1758, p. 41; I, 1766, p. 60. Type *Felis catus* Linnæus.

Linx (sic) Frisch, Das Nat.-Syst. vierfüss. Thiere, in Tabellen, 12, Tab. Gen., 1775.

Lynx Kerr, Anim. Kingd., Syst. Catal., Mamm., I, 1792, pp. 41, 155.

Lynceus Gray, Lond. Med. Repos., xv, 1821, p. 302.

Puma Jard., Nat. Libr., Mamm., II, 1834, pp. 266.

Lynchus Jard., Nat. Libr., Mamm., II, 1834, pp. 274, 275.

Leopardus Gray, Ann. Mag. Nat. Hist., x, 1842, p. 260. (nec 1867.)

Herpailurus Severtz., Rev. Mag. Zool., 2me Sér., x, 1858, p. 385.

Jaguarius Severtz., Rev. Mag. Zool., 2me Sér., x, 1858, pp. 386, 390.

Lynchailurus Severtz., Rev. Mag. Zool., 2me Sér., x, 1858, pp. 386, 390.

Noctifelis Severtz., Rev. Mag. Zool., 2me Sér., x, 1858, pp. 386, 390.

Oncifelis Severtz., Rev. Mag. Zool., 2me Sér., x, 1858, pp. 386, 390.

Leopardus Gray, Proc. Zoöl. Soc., 1867, p. 263. (nec 1842.)

Margay Gray, Proc. Zoöl. Soc., 1867, p. 271.

Pardalis Gray, Proc. Zoöl. Soc., 1867, p. 272.

Cervaria Gray, Proc. Zoöl. Soc., 1867, p. 276.

Subgenus A. Leopardus. Tigers, Jaguars, etc.

663. Felis tigris Linnæus.

Felis tigris Linn., Syst. Nat., I, 1758, p. 41; I, 1766, p. 61. Elliot, Mon. Felidæ, 1883, pl. III.

Felis tigris var. *a mongolica* Less., Nouv. Tab. Regn. Anim., 1842, p. 50.

Felis tigris var. *b nigra* Less., Nouv. Tab. Regn. Anim., 1842, p. 50.

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Felis tigris var. *c alba* Less., Nouv. Tab. Regn. Anim., 1842, p. 50.
Tigris regalis Gray, List Spec. Mamm. Brit. Mus., 1843, p. 40.
Tigris striatus Severtz., Rev. Mag. Zool., 2me Sér., x, 1858, p. 386.
Tigris regalis alba Fitzin., Sitzungsb. Akad. Wiss. Wien, LVIII, 1868, p. 448.
Tigris regalis hybrida Fitzin., Sitzungsb. Akad. Wiss. Wien, LVIII, 1868, p. 450.
Tigris sondaica Fitzin., Sitzungsb. Akad. Wiss. Wien, LVIII, 1868, p. 454.
Tigris longipilis Fitzin., Sitzungsb. Akad. Wiss. Wien, LVIII, 1868, p. 455.

THE TIGER.

1–2. Adult ♂ & ♀ P. "Amurland." Ward's Nat. Scien. Establ., Rochester, N. Y.

664. Felis uncia Schreber.

Felis uncia Schreb., Säugth., III, 1778, p. 386, pl. c. Elliot, Mon. Felidæ, 1883, pl. IV, text.
Felis pardus Pall., Zoog. Rosso-Asiat., I, 1811, p. 17. (nec Linn.)
Felis irbis Ehrenb., Ann. Scien. Nat., XXI, 1830, p. 394.
Felis uncioides Hodgs., Horsf. Ann. Nat. Hist., XVI, 1855, p. 105.
Uncia irbis Gray, Proc. Zoöl. Soc., 1867, p. 262, fig. 1.

SNOW LEOPARD.

1. Adult — P. "Tibet." Ward's Nat. Scien. Establ., Rochester, N. Y.

665. Felis pardus Linnæus.

Felis pardus Linn., Syst. Nat., I, 1758, p. 41; I, 1766, p. 61. Elliot, Mon. Felidæ, 1883, pls. VI, VII.
Felis leopardus Erxleb., Syst. Regn. Anim., 1777, p. 509, sp. 5.
Felis panthera Pall., Zoog. Rosso-Asiat., I, 1811, p. 18.
Felis melas Less., Mon. Mamm., 1827, p. 188.
Felis antiquorum Fisch., Syn. Mamm., 1829, p. 566.
Leopardus varius Gray, List Spec. Mamm. Brit. Mus., 1843, p. 40, sp. *a–h*.
Felis poecilura Valencien., Compt. Rend., XLII, 1856, p. 1036.
Leopardus japonensis Gray, Proc. Zoöl. Soc., 1862, p. 262, pl. XXXIII; 1867, p. 264.
Leopardus perniger Hodgs., Cat. Mamm. & Birds Nepal., 2d ed., 1863, p. 3.
Felis fontanieri A. Milne-Edw., Ann. Scien. Nat., Sér. 5, VIII, 1867, p. 375.

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Leopardus pardus Gray, Proc. Zoöl. Soc., 1867, p. 263.

Leopardus chinensis Gray, Proc. Zoöl. Soc., 1867, p. 264, fig. 2. (nec Gray, 1842.)

Panthera nimr Fitzin., Sitzungsb. Akad. Wiss. Wien, LVIII, 1868, p. 461.

Panthera nimr niger Fitzin., Sitzungsb. Akad. Wiss. Wien, LVIII, 1868, p. 466.

Panthera antiquorum Fitzin., Sitzungsb. Akad. Wiss. Wien, LVIII, 1868, p. 468.

Panthera leopardus Fitzin., Sitzungsb. Akad. Wiss. Wien, LVIII, 1868, pp. 473, 478.

Panthera variegata Fitzin., Sitzungsb. Akad. Wiss. Wien, LVIII, 1868, p. 477.

LEOPARD.

1. Adult ♀ Coll. Hersi Barri, Ogaden, East Africa. D. G. Elliot.
2. Adult ♂ Melanistic form. P. Java. Ward's Nat. Scien. Establ., Rochester, N. Y.

FIG. XLI. FELIS ONCA. JAGUAR.
1. Felis onca; 2. Felis o. hernandezi.

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a. Felis onca hernandezi (Gray).

Leopardus hernandezii Gray, Proc. Zoöl. Soc., 1857, p. 278.

Felis onca Elliot, Mon. Felidæ, 1883, pl. v, rear figure. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 294. Zoöl. Ser. (Part.)

Felis onca hernandezi Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 446. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 365. Zoöl. Ser.

HERNANDEZ'S JAGUAR.

1. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

666. Felis pardalis Linnæus.

Felis pardalis Linn., Syst. Nat., I, 1758, p. 42; I, 1766, p. 62. Elliot, Mon. Felidæ, 1883, pl. XVIII. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 294. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 447. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 366. Zoöl. Ser.

OCELOT. *Manigordo* in Costa Rica.

1. Adult — Coll. Sanborn, State of Vera Cruz, Mexico. S. E. Meek.
2. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
3. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

667. Felis catenata H. Smith.

Felis catenata H. Smith, Griff. Anim. Kingd., V, 1827, p. 169.

STRIPED OCELOT.

1. Adult ♂ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.
2. Adult ♀ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.

668. Felis tristis A. Milne-Edwards.

Felis tristis A. Milne-Edw., Research. Mamm., 1871, p. 223, pl. 31d. Elliot, Mon. Felidæ, 1883, pl. XXIII.

CHINESE CAT.

1. Adult — Exch. Tsekou, Tibet. Mus. Hist. Nat. Paris. Soubié.

669. Felis scripta A. Milne-Edwards.

Felis scripta A. Milne-Edwards, Nouv. Archiv. Mus. Hist. Nat. Paris, VII, Bull., 1871, p. 92. Elliot, Mon. Felidæ, 1883, pl. XXIV.

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Felis barbarus var. α Fisch., Syn. Mamm., I, 1829, p. 197.
Felis senegalensis var. β Fisch., Syn. Mamm., I, 1829, p. 197.
Felis persicus var. γ Fisch., Syn. Mamm., I, 1829, p. 197.
Felis leo goojratensis Smee, Trans. Zoöl. Soc., I, 1833, p. 165, pl. 24.
Leo gambianus Gray, List Spec. Mamm. Brit. Mus., 1843, p. 40.
Tigris leo Severtz., Rev. Mag. Zool., 2me Sér., X, 1858, p. 388.
Leo nobilis Gray, Proc. Zoöl. Soc., 1867, p. 263.
Leo capensis Fitzin., Sitzungsb. Akad. Wiss. Wien, LVIII, 1868, p. 432.
Leo guzeratensis Fitzin., Sitzungsb. Akad. Wiss. Wien, LVIII, 1868, p. 443.

LION.

1. Adult ♂ Coll. South of Toyo Plain, Somaliland, East Africa. D. G. Elliot.
2. Juv. ♀ Coll. South of Toyo Plain, Somaliland, East Africa. D. G. Elliot.
3. Adult ♂ P. Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.
4. Adult ♀ P. Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.
5. Adult ♀ P. Pungwe River, Portuguese E. Africa. McEwen & Cabot.

a. Felis concolor oregonensis (Rafinesque).
Felix! oregonensis Rafin., Atlantic Journal, I, 1832, p. 62.
Felis hippolestes Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 219.
Felis hippolestes olympus Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 220.
Felis hippolestes aztecus Merr., Proc. Wash. Acad. Scien., III, 1901, p. 592.
? *Felis aztecus browni* Merr., Proc. Biol. Soc. Wash., XVI, 1903, p. 73.
Felis concolor oregonensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 294. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 454, pls. XLIV, XLV. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 369. Zoöl. Ser.

NORTHWESTERN PUMA.

1. Adult ♂ P. Colorado. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♀ P. Colorado. Ward's Nat. Scien. Establ., Rochester, N. Y.

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3–4. Juv. — P. Colorado. Ward's Nat. Scien. Establ., Rochester, N. Y.
5. Adult ♀ P. Okanagan Valley, British Columbia, Canada. G. F. Dippie.
6. Adult — Pres. Montana. A. B. Shubert.
7–11. Adult — Pres. Colonia Garcia, State of Chihuahua, Mexico. V. S. Kennedy.
12. Adult — P. No history. C. E. Akeley.
13. Adult ♂ P. Colville Ind. Reserv., Washington. A. B. Shubert.

675. Felis cougar Kerr.

Felis cougar Kerr, Anim. Kingd., 1792, p. 151. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 369. Zoöl. Ser.

Felis pennsylvanica Link, Beitr. Naturg., II, 1795, p. 90.

Felis concolor floridana Cory, Hunt. & Fish. Florida, 1896, p. 109.

Felis coryi Bangs, Proc. Biol. Soc. Wash., XIII, 1899, p. 15.

Felis concolor Auct., Eastern North America.

EASTERN PUMA.

1. Adult — Pres. Hapata Flats, North-East Lake, Okeechobee, Florida. C. B. Cory.

676. Felis jaguarondi Fischer.

Felis jaguarondi Fisch., Zoogn., 1814, p. 228. Elliot, Mon. Felidæ, 1883, pl. XIII. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 295. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 451, fig. 83. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 367. Zoöl. Ser.

JAGUARONDI. *Leon monero*, *Leon miquero* in Costa Rica.

1. Adult — P. Texas. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♀ P. Cameron County, Texas. C. K. Worthern.

a. Felis eyra apache (Mearns).

Felis eyra Baird, Rep. U. S. & Mex. Bound. Surv., Mamm., 1859, p. 10, pl. II, fig. 1. (nec Fischer.)

Felis apache Mearns, Proc. Biol. Soc. Wash., XIV, 1901, p. 150.

Felis eyra apache Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 453. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 368. Zoöl. Ser.

TAMAULIPAS EYRA. *Apache*, *Onza* in Mexico.

1. Adult — Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

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677. Felis badia Gray.

Felis badia Gray, Proc. Zoöl. Soc., 1874, p. 322, pl. 49. Elliot, Mon. Felidæ, 1883, pl. xv.

BORNEAN RED CAT.

1. Adult — Melanistic form. P. Gunong Mulu, Borneo. E. Gerrard & Sons.

Subgenus C. **Lynx. Lynxes.**

678. Felis canadensis (Kerr).

Lynx canadensis Kerr, Anim. Kingd., 1792, p. 32, desc. p. 157.

Felis canadensis Elliot, Mon. Felidæ, 1883, pl. xxxvii. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., ii, 1901, p. 295. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., vi, 1905, p. 370. Zoöl. Ser.

CANADA LYNX.

1. Adult — P. Ontario, Canada. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Felis canadensis mollipilosa (Stone).

Lynx canadensis mollipilosa Stone, Proc. Acad. Nat. Scien. Phil., 1900, p. 48.

Felis canadensis mollipilosa Elliot, Syn. N. Am. Mamm., F. C. M. Pub., ii, 1901, p. 295. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., vi, 1905, p. 370. Zoöl. Ser.

SOFT-FURRED LYNX.

1–5. Adult — P. Sushitna River, Mt. McKinley Region, Alaska. C. F. Periolat.

6. Juv. — P. Sushitna River, Mt. McKinley Region, Alaska. C. F. Periolat.

Subgenus D. **Cervaria.**

679. Felis rufa Güldenstaedt.

Felis ruffa (sic) Güldenst., Nov. Comm. Acad. Imp. Scien. St. Pétersb., xx, 1776, p. 484.

Felis rufa Elliot, Mon. Felidæ, 1883, pl. xl. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., ii, 1901, p. 296. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., vi, 1905, p. 370. Zoöl. Ser.

RED LYNX, WILD CAT.

1. Adult — P. South Carolina. Ward's Nat. Scien. Establ., Rochester, N. Y.

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2. Adult — P. Texas. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. *Felis rufa fasciata* (Rafinesque).

Lynx fasciatus Rafin., Am. Month. Mag., II, 1817, p. 46.

Felis rufa fasciata Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 297. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 371. Zoöl. Ser.

BARRED LYNX.

1. Adult ♂ Coll. Barnes's Creek, Clallam County, Washington. D. G. Elliot.

b. *Felis rufa baileyi* (Merriam).

Lynx baileyi Merr., N. Am. Faun., No. 3, 1890, p. 79.

Felis rufa baileyi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 297. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 459, figs. 84, LX. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 372. Zoöl. Ser.

BAILEY'S LYNX.

1–2. Adult — Exch. ———?. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

FIG. XLII. FELIS R. BAILEYI. BAILEY'S LYNX.

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3–4. Adult ♂ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.
5. Adult — Coll. Huachuca Plains, Arizona. G. F. Breninger.
6–9. Adult — Pres. Casas Grandes, State of Chihuahua, Mexico. V. S. Kennedy.

c. Felis rufa californica (Mearns).
Lynx rufus californicus Mearns, Proc. U. S. Nat. Mus., xx, 1897, p. 458.
Felis rufa californica Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 298. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 458. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 372. Zoöl. Ser.
CALIFORNIA LYNX.
1. Adult ♀ Coll. Hanson Lagoon, Hanson Laguna Mts., Lower California, Mexico. E. Heller.
2. Juv. ♀ Coll. Hanson Lagoon, Hanson Laguna Mts., Lower California, Mexico. E. Heller.

d. Felis rufa floridana (Rafinesque).
Lynx floridanus Rafin., Am. Month. Mag., II, 1817, p. 46.
Felis rufa floridana Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 299. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 372. Zoöl. Ser.
FLORIDA LYNX.
1. Adult — Pres. Florida. C. B. Cory.

Genus 186. **Acinonyx.**

Acinonyx Brookes, Cat. Anat. & Zoöl. Mus. Joshua Brookes, Lond., 1828, p. 33. Type *Acinonyx venator* Brookes=*Felis jubata* Erxleben.
Cynailurus Wagl., Nat. Syst. Amphib., 1830, p. 30.
Guepardus Duvern., L'Inst. Paris, II, No. 51, 1834, p. 145.
Cynofelis Less., Nouv. Tabl. Règn. Anim., 1842, p. 48.

680. Acinonyx jubatus (Erxleben).
Felis jubata Erxl., Syst. Reg. Anim., 1777, p. 510.
Cynailurus jubatus Wagl., Nat. Syst. Amphib., 1830, p. 30. Elliot, Mon. Felidæ, 1883, pl. XLIII.
Felis guttata Less., Compl. Buff., I, 1838, p. 409.
Cynofelis jubata Less., Nouv. Tab. Règn. Anim., 1842, p. 49.

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Felis megabalia Heugl., Zeit. Ges. f. Erdkunde, Berlin, III, 1868, p. 53.
Cynailurus venaticus Fitzin., Sitzungsb. Akad. Wiss. Wien, 1869.
Felis lanea Sclat., Proc. Zoöl. Soc., 1877, p. 532, pl. 55.

CHEETAH, HUNTING LEOPARD.

1. Adult ♂ Coll. Hullieh, Somaliland, East Africa. D. G. Elliot.
2. Adult ♀ Coll. Hullieh, Somaliland, East Africa. D. G. Elliot.

3–6. Juv. — Coll. Adadleh, Somaliland, East Africa. D. G. Elliot.

Family II. **Viverridæ. Mungooses, Civets.**

Subfamily I. **Cryptoproctinæ.**

Genus 187. **Cryptoprocta.**

Cryptoprocta Bennett, Proc. Zoöl. Soc., 1832, p. 46. Type *Cryptoprocta ferox* Bennett.

681. Cryptoprocta ferox Bennett.
Cryptoprocta ferox Bennett, Proc. Zoöl. Soc., 1832, p. 46.

FIG. XLIII. CRYPTOPROCTA FEROX. THE FOUSSA.

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Paradoxurus musanga Gray, Proc. Zoöl. Soc., 1832, p. 66.
Paradoxurus crossii Gray, Proc. Zoöl. Soc., 1832, p. 67.
Paradoxurus pallasii Gray, Proc. Zoöl. Soc., 1832, p. 67.
Paradoxurus hermaphroditus Blanf., Proc. Zoöl. Soc., 1885, p. 794.

MALAYAN PALM-CIVET.

1. Adult — P. Borneo. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♀ Melanistic form. P. Altapupu, Timor. A. Everett.
3. Adult — P. Malacca. E. Gerrard & Sons.

Genus 192. **Hemigalus.**

Hemigalus Jourd., Compt. Rendus, v, 1837, p. 442. Type *Viverra hardwickii* Gray.

688. Hemigalus hardwicki (Gray).

Viverra hardwickii Gray, Spic. Zool., ii, 1830, p. 9. (nec Less.)
Hemigale zebre Éyd. & Soul., Voy. 'Bonite,' Mamm., 1837–8, pl. v.
Paradoxurus derbyanus Gray, Mag. Nat. Hist., i, 1837, p. 579.
Paradoxurus? zebra Gray, Mag. Nat. Hist., i, 1837, p. 579.
Viverra boiei Müll., Tijd. Nat. Gesch., v, 1863, p. 144.

HARDWICKE'S PALM-CIVET.

1. Adult. ♀ P. Borneo. E. Gerrard & Sons.

Genus 193. **Arctictis.**

Arctictis Temm., Prosp. Mon. Mamm., 1824. Type *Viverra? binturong* Raffles.
Ictides Valencien., Ann. Scien. Nat., Paris, iv, 1825, p. 57.

689. Arctictis binturong (Raffles).

Viverra ? binturong Raffles, Trans. Linn. Soc., xii, 1822, p. 253.
Arctictis binturong Temm., Mon. Mamm., i, 1827, p. xxi; ii, 1835, p. 308.
Arctictis penicillatus Temm., Mon. Mamm., ii, 1835, p. 2.
Paradoxurus albifrons F. Cuv., Mém. Mus., ix, 1822, p. 44, t. 4.
Ictides ater F. Cuv., Mamm. Lithogr., i, 1824, pl. 202.

BINTURONG, BEAR-CAT.

1. Adult — P. Borneo. Ward's Nat. Scien. Establ., Rochester, N. Y.

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Genus 194. **Nandinia.**

Nandinia Gray, List Spec. Mamm. Brit. Mus., 1843, pp. xx, 54. Type *Viverra binotata* Gray.

690. Nandinia binotata (Gray).

Viverra binotata Gray, Spic. Zool., II, 1830, p. 9.
Paradoxurus hamiltoni Gray, Proc. Zoöl. Soc., 1832, p. 67.
Nandinia binotata Gray, List Spec. Mamm. Brit. Mus., 1843, p. 54.

NANDINA.

1. Adult — P. West Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 195. **Arctogalidia.**

Arctogalidia Merr., Science, N. S., v, 1897, p. 302. Type *Paradoxurus trivirgatus* Gray.

Arctogale Peters, Handb. Zool., I, 1863, p. 98. (nec Kaup, 1829.)

691. Arctogalidia leucotis (Blyth).

Paradoxurus leucotis Blyth, Horsf. Cat., 1851, p. 66. Gray, Cat. Carniv. Pachyd. & Edent. Mamm. Brit. Mus., 1869, p. 76.
Paradoxurus prehensilis Sclat., Proc. Zoöl. Soc., 1877, p. 681, pl. LXXI. (nec Blainv.)
Arctogale leucotis Blanf., Faun. Brit. India, Mamm., 1888–1891, p. 115, fig. 30.

SMALL-TOOTHED PALM-CIVET.

1. Adult ♂ P. Lingga Island, Sumatra. A. H. Everett.

Subfamily II. **Mungosinæ.**

Genus 196. **Mungos.**

Mungos Geoff. & Cuvier, Mag. Encyclop., II, 1795, pp. 184, 187. Ogilby, Proc. Zoöl. Soc., 1835, p. 103. Type *Viverra ichneumon* Linnæus.

Ichneumon Frisch, Das Nat.-Syst. vierfüss. Thiere, in Tabellen, II, Tab. Gen., 1775. (nec Linn.)
Herpestes Illig., Prodr. Syst. Mamm. et Av., 1811, p. 135.
Mangusta Horsf., Zoöl. Research., 1824, pl. & text.
Atilax F. Cuv., Hist. Nat. Mamm., V, livr. LIV, 1826, pl. & text.

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Urva Hodgs., Jour. Asiat. Soc. Beng., VI, Pt. 2, 1837, p. 561.
Mesobema Hodgs., Calcutta Jour. Nat. Hist., II, 1841, p. 214.
Osmetectis Gray, Ann. Mag. Nat. Hist., X, 1842, p. 260.
Calogale Gray, Proc. Zoöl. Soc., 1864, p. 560.
Calictis Gray, Proc. Zoöl. Soc., 1864, p. 564.
Tæniogale Gray, Proc. Zoöl. Soc., 1864, p. 569.
Onychogale Gray, Proc. Zoöl. Soc., 1864, p. 570.

692. Mungos mungo (Gmelin).

Viverra mungo Gmel., Syst. Nat., I, 1788, p. 84.
Ichneumon griseus E. Geoff., Descrip. Egypt, II, 1812, p. 157.
Herpestes griseus Desm., Mamm., 1820, p. 212.
Herpestes frederici Desm., Dict. Scien. Nat., XXIX, 1823, p. 60.
Herpestes pallidus Wagn., Schreb. Säugth., Suppl., II, 1841, p. 311, pl. CXVI.
Herpestes ferrugineus Blanf., Proc. Zoöl. Soc., 1874, p. 661, pl. LXXXI.
Herpestes andersoni Murray, Vert. Zoöl. Sind, 1884, p. 34.
Herpestes mungo Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 462, figs. 85, LXI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 374. Zoöl. Ser.

FIG. XLIV. MUNGOS MUNGO. MUNGOOSE.

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COMMON INDIAN MUNGOOSE.

1. Adult ♂ P. San Domingo City, San Domingo. G. K. Cherrie.

693. Mungos gracilis Rüppell.

Herpestes gracilis Rüpp., Neu. Wirbelth. Abyss., 1835, p. 29, pl. VIII, fig. 2.

Herpestes mutgigella Rüpp., Neu. Wirbelth. Abyss., 1835, p. 29, pl. IX, fig. 1.

Ichneumia nigricaudatus Geoff., Mag. Zool., 1839, p. 18.

Herpestes galinieri Guérin, Ferr. & Galin. Voy. Abyss., Alt. Zool., 1847, pl. I, fig. 1.

Herpestes punctulatus Gray, Proc. Zoöl. Soc., 1849, p. 11.

Herpestes lefebvrei Des Murs & Prév., Lefeb. Voy. Abyss., Atl. Zool., 1850, pl. I.

Herpestes ornatus Peters, Reis. nach Mossamb., Säugeth., 1852, p. 117, pl. XXVI.

Herpestes ochromelas Pucher., Rev. Mag. Zool., VII, 1855, p. 393.

Herpestes iodoprymnus Heugl., Nov. Act. Acad. Cæs. Leop.-Carol., XXIX, 1861, p. 23.

Herpestes adailensis Heugl., Peterm. Geog. Mittheil., 1861, p. 17.

Herpestes mutscheltschela & *H. ruficauda* Heugl., Reis. N. Afr., II, 1877, pp. 41, 43.

GRACEFUL MUNGOOSE.

1. Adult ♀ P. Upper Shire River, British Central Africa. P. Rendall.

Genus 197. **Helogale.**

Helogale Gray, Proc. Zoöl. Soc., 1861, p. 308, figs. Type *Herpestes parvulus* Sundevall.

694. Helogale atkinsoni Thomas.

Helogale atkinsoni Thos., Ann. Mag. Nat. Hist., XX, 6th Ser., 1897, p. 377. *Id.* Proc. Zoöl. Soc., 1902, p. 119.

ATKINSON'S MUNGOOSE.

1. Adult ♂ Coll. Hullieh, Somaliland, East Africa. D. G. Elliot.

Genus 198. **Cynictis.**

Cynictis Ogilby, Proc. Zoöl. Soc., 1833, p. 48. Type *Cynictis steedmanni* Ogilby = *Herpestes penicillatus* Cuvier.

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695. Cynictis penicillatus (G. Cuvier).

Herpestes penicillatus G. Cuv., Règ. Anim., 2me ed., I, 1829, p. 158.

Mangusta levaillantii A. Smith, Zoöl. Jour., IV, 1829, p. 437.

Cynictis steedmanni Ogilby, Proc. Zoöl. Soc., 1833, p. 49.

Cynictis ogilbyii A. Smith, S. Afr. Quart. Jour., II, 1834, p. 116.

Cynictis lepturus A. Smith, Ill. S. Afr. Zoöl., Mamm., 1839, pl. XVII.

BUSHY-TAILED MEERKAT.

1. Adult — P. Cape Colony, S. Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult — P. South Africa. E. Gerrard & Sons.

Family III. **Hyænidæ. Hyænas.**

Subfamily I. **Protelinæ.**

Genus 199. **Proteles.**

Proteles I. Geoff., Mém. Mus. Hist. Nat, Paris, XI, 1824, p. 355, pl. 20. Type *Proteles lalandii* Geoffroy = *Viverra cristata* Sparrman.

696. Proteles cristatus (Sparrman).

Viverra cristata Sparrm., Resa till Goda Hopps-udden, I, 1783, p. 581; *Id.* English Translation, II, 1785, p. 192.

Viverra hyaenoides Desm., Mamm., 1820, p. 538.

Proteles lalandii Is. Geoff., Mém. Mus. Hist. Nat. Paris, XI, 1824, p. 371, pl. 20.

Proteles cristatus W. L. Sclater, Faun. S. Afr., Mamm., I, 1900, p. 80, figs. 20, 21.

AARD-WOLF.

1. Adult — P. Cape Colony, South Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

Subfamily II. **Hyæninæ.**

Genus 200. **Hyæna.**

Hyæna Brisson, Regn. Anim., 2d ed., 1762, p. 169. Type *Hyæna hyæna* Brisson = *Canis hyæna* Linnæus.

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697. Hyæna crocuta (Erxleben).

Canis crocuta Erxleben, Syst. Regn. Anim., 1777, p. 578.
Hyæna crocuta Zimm., Geogr. Gesch., 1777, p. 256. W. L. Sclater, Faun. S. Afr., Mamm., I, 1900, p. 87, fig. 22.
Hyæna capensis Desm., Mamm., 1820, p. 216.
Crocuta maculata Layard, Cat. Mamm. S. Afr. Mus., 1862, p. 36. Gray, Proc. Zoöl. Soc., 1868, p. 525.

SPOTTED HYÆNA.

1. Adult — P. South Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♂ Coll. Le Gud, Somaliland, E. Africa. D. G. Elliot.
3. Juv ♂ Coll. Le Gud, Somaliland, E. Africa. D. G. Elliot.
4. Adult ♂ Coll. Marodijeh, Somaliland, E. Africa. D. G. Elliot.

698. Hyæna hyæna (Linnæus).

Canis hyæna Linn., Syst. Nat., I, 1758, p. 40; I, 1766, p. 58.
Hyæna striata Zimm., Specim. Zool. Geogr., 1777, p. 366.
Hyæna orientalis Tiedem., Zool., I, 1808, p. 500.
Hyæna vulgaris Desm., Mamm., 1820, p. 215.
Hyæna antiquorum Temm., Ann. Gen. Scien. Phys., III, 1820, p. 51.
Hyæna virgata Gray, Proc. Zoöl. Soc., 1856, p. 397.

STRIPED HYÆNA.

1. Adult ♂ Coll. South of Toyo Plain, Somaliland, East Africa. D. G. Elliot.
2. Adult ♂ Coll. Hersi Barri, Ogaden, Somaliland, East Africa. D. G. Elliot.
3. Juv. ♂ Coll. Hullieh, Somaliland, East Africa. D. G. Elliot.
4. Adult ♀ Coll. Durban, Somaliland, East Africa. D. G. Elliot.
5. Adult — P. North Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.
6. Adult — Pres.———? Lincoln Park Menagerie, Chicago.

Family IV. **Canidæ. Dogs, Wolves, Foxes.**

Subfamily I. **Caninæ.**

Genus 201. **Nyctereutes.**

Nyctereutes Temm., Tidsch. Nat. Geschied. Phys., V, 1838-39, p. 285. Type *Canis procyonoides* Gray.

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3. Adult ♀ Coll. Marodijeh, Somaliland, East Africa. D. G. Elliot.
4. Adult ♀ Coll. South of Toyo Plain, Somaliland, East Africa. D. G. Elliot.

703. Canis anthus F. Cuvier.

Canis anthus F. Cuv., Hist. Nat. Mamm., II, 1824.
Canis variegatus Rüpp., Atlas Zool., 1826, p. 31, pl. 10.
Canis lupaster Hempr. & Ehrenb., Symb. Phys., 1833, p.——
Satalius barbarus H. Smith, Jard. Nat. Libr., Mamm., IX, 1839, p. 218.
Lupus anthus Gray, Proc. Zoöl. Soc., 1868, p. 502.
Dieba anthus Gray, Cat. Carniv. Pachyd. & Edent. Mamm. Brit. Mus., 1869, p. 189.

NORTH AFRICAN JACKAL.

1. Adult ♂ Coll. Berbera, Somaliland, East Africa. D. G. Elliot.
2. Adult ♂ Coll. Anouf Prairie, Somaliland. East Africa. D. G. Elliot.

704. Canis cancrivorus Desmarest.

Canis cancrivorus Desm., Mamm., 1820, p. 199.
Canis brasiliensis Lund, Blik Bras. Dyrev. femte Afhandl., 1843, p. 10, pl. 42, figs. 1–3.
Canis melampus Wagn., Archiv f. Natur., IX, 1843, p. 357.
Canis melanostomus Wagn., Archiv f. Natur., IX, 1843, p. 358.

CRAB-EATING DOG.

1. Adult — P. South America. Ward's Nat. Scien. Establ., Rochester, N. Y.

705. Canis azaræ Maximilian.

Canis azaræ Max., Beitr. Nat. Bras., II, 1826, p. 338.
Canis fulvipes Martin, Proc. Zoöl. Soc., 1837, p. 11.
Canis entrerianus Burm., Reis. de la Plata, II, 1861, p. 400.
Canis gracilis Burm., Reis. de la Plata, II, 1861, p. 406.

AZARA DOG.

1. Adult — P. South America. Ward's Nat. Scien. Establ., Rochester, N. Y.

706. Canis aquilus (Bangs).

Urocyon aquilus Bangs, Proc. Biol. Soc. Wash., XII, 1898, p. 93.
Canis aquilus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1904, p. 450.

COLOMBIAN WILD DOG.

1. Adult — P. Bonda, Colombia, South America. H. H. Smith.

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Subgenus B. **Lupulus.**

707. Canis latrans Say.

Canis latrans Say, Long's Exped. Rocky Mts., I, 1823, p. 168. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 301, pl. XXIX. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 376. Zoöl. Ser.

BARKING COYOTE.

1. Adult ♀ P. Quesvelle, British Columbia, Canada. C. K. Worthern.
2. Adult ♀ Pres. Minkata, Minnesota. A. Schubert.
3. Adult ♀ Kansas. No record.
4. Adult ♂ Melanistic form. P. Winnipeg, Manitoba, Canada. A. C. Foster.

708. Canis lestes Merriam.

Canis lestes Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 25. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 301. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 465. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 377. Zoöl. Ser.

ROBBER COYOTE.

1. Adult ♂ Coll. Long Cañon, Mt. Whitney, California. E. Heller.
2. Adult ♂ Coll. Whitney Creek, Mt. Whitney, California. E. Heller.
3. Adult ♀ Coll. Big Cottonwood Meadows, Mt. Whitney, California. E. Heller.

709. Canis nebrascensis Merriam.

Canis pallidus Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 24. (preoccupied.)

Canis nebracensis! Merr., Science, N. Ser., VIII, 1897, p. 782. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 301. Zoöl. Ser.

Canis nebrascensis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 377. Zoöl. Ser.

NEBRASKA COYOTE.

1. Adult ♂ P. Alberta, Canada. G. F. Dippie.
2. Adult ♀ P. Red Deer, Alberta, Canada. G. F. Dippie.

710. Canis mearnsi Merriam.

Canis mearnsi Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 30. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 302. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 468. Zoöl. Ser. *Id.* Check-L. Mamm.

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FIG. XLVI. CANIS MEXICANUS. MEXICAN TIMBER WOLF.

3. Adult — P. ———? C. E. Akeley.
4. Adult — P. Nebraska. Ward's Nat. Scien. Establ., Rochester, N. Y.
5. Adult — P. Park Siding, Michigan. Reinboldt.

717. Canis griseus (Sabine).

Canis lupus griseus Sabine, Frankl. Narr. Journ. Polar Sea, 1823, p. 654.

Canis lupus albus Sabine, Frankl. Narr. Journ. Polar Sea, 1823, p. 655.

Lupus griseus var. A. Richard., Faun. Bor. Amer., Mamm., 1, 1829, p. 66.

Lupus albus var. B. Richard., Faun. Bor. Amer., Mamm., 1, 1829, p. 68.

Lupus sticte var. C. Richard., Faun. Bor. Amer., Mamm., 1, 1829, p. 68.

Lupus ater var. E. Richard., Faun. Bor. Amer., Mamm., 1, 1829, p. 70.

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Canis occidentalis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 300. Zoöl. Ser. (Part.)

Canis griseus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 375. Zoöl. Ser.

ARCTIC WOLF.

1. Adult ♀ P. Gleichen, Alberta, Canada. G. F. Dippie.
2. Juv. ♂ P. Gleichen, Alberta, Canada. G. F. Dippie.
3–4. Juv. ♀ P. Gleichen, Alberta, Canada. G. F. Dippie.

718. Canis pambasileus Elliot.

Canis pambasileus Elliot, Proc. Biol. Soc. Wash., XVIII, 1905, p. 79. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 374. Zoöl. Ser.

AUTOCRAT TIMBER WOLF.

1–2. Adult ♂ Type & paratype. P. Sushitna River, Mt. McKinley Region, Alaska. C. F. Periolat.
3–5. Adult — P. Kenai Peninsula, Alaska. C. F. Periolat.

Genus 205. **Vulpes. Red Foxes.**

Vulpes Frisch, Das Nat.-Syst. vierfüss. Thiere, in Tabellen, Tab. Gen., 1775. Type *Canis vulpes* Linnæus.

Leucocyon Gray, Proc. Zoöl. Soc., 1868, p. 521.

719. Vulpes fulva (Desmarest).

Canis fulvus Desm., Mamm., I, 1820, p. 203.

Canis decussatus Desm., Mamm., I, 1820, p. 203.

Vulpes pennsylvanica Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 304. Zoöl. Ser.

Vulpes fulva Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 380. Zoöl. Ser.

RED FOX.

1. Adult — P. New York. Ward's Nat. Scien. Establ., Rochester, N. Y.
2–3. Adult — P. Sushitna River, Mt. McKinley Region, Alaska. C. F. Periolat.
4–6. Adult — P. Log Cabin, Stevensville Crossing, Newfoundland. C. F. Periolat.
7. Adult ♀ P. Job's Knob Mountain, West Virginia. T. Surber.

a. Vulpes fulva argentata (Shaw).

Canis argentatus Shaw, Gen. Zoöl., I, 1800, p. 325.

Vulpes pennsylvanica argentata Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 304. Zoöl. Ser.

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SWIFT FOX.

1. Adult — P. Rocky Ford, Colorado. B. B. Beymer.

a. Vulpes velox hebes Merriam.

Vulpes velox hebes Merr., Proc. Biol. Soc. Wash., XV, 1902, p. 73. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 384. Zoöl. Ser.

SLUGGISH FOX.

1. Adult ♂ P. Rush Lake, Assiniboia, Canada. G. F. Dippie.
2–3. Adult ♀ P. Rush Lake, Assiniboia, Canada. G. F. Dippie.
4–5. Adult ♀ Topotypes. P. Calgary, Alberta, Canada. G. F. Dippie.

724. Vulpes arsipus Elliot.

Vulpes arsipus Elliot, Pub. Field Columb. Mus., III, 1903, p. 256. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 385. Zoöl. Ser.

SWIFT-FOOTED KIT FOX.

1–2. Adult ♂ Type and paratype. Coll. Daggett, Mohave Desert, California. E. Heller.
3–4. Adult ♀ Paratypes. Coll. Daggett, Mohave Desert, California. E. Heller.
5. Adult ♀ Coll. Wild Rose Spring, Panamint Mts., California. E. Heller.
6. Adult ♀ Coll. Pilot Knob, California. E. Heller.

725. Vulpes vulpes Linnæus.

Canis vulpes Linn., Syst. Nat., I, 1758, p. 40; I, 1766, p. 59.
Canis alopex Linn., Syst. Nat., I, 1758, p. 40; I, 1766, p. 59.
Canis vulpes montana Pearson, Jour. Asiat. Soc. Beng., V, 1836. p. 313.
Canis himalaicus Ogilby, Proc. Zoöl. Soc., 1836, p. 103.
Vulpes flavescens Gray, Ann. Mag. Nat. Hist., XI, 1843, p. 118.

COMMON FOX.

1. Adult — P. Europe. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 206. **Urocyon. Gray Foxes.**

Urocyon Baird, N. Am. Mamm., 1857, p. 121. Type *Canis virginianus* Erxleben = *Canis cinereo-argenteus* Müller.

726. Urocyon cinereo-argenteus (Müller).

Canis cinereo-argenteus Müll., Natur. Suppl., 1776, p. 29. (Desc.) Schreb., Säugth., III, 1776, p. 361, pl. XCII, 1775.

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Canis virginianus Erxl., Syst. Regn. Anim., 1777, p. 567.
Canis griseus Bodd., Elench. Anim., I, 1784, p. 97.
Urocyon cinereo-argenteus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 307. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 386. Zoöl. Ser.

GRAY FOX.

1. Adult ♂ P. White Sulphur Springs, West Virginia. T. Surber.

a. *Urocyon cinereo-argenteus scotti* Mearns.

Urocyon cinereo-argenteus scotti Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 236. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 308, pl. XXXI. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 477. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 386. Zoöl. Ser.

SCOTT'S GRAY FOX.

1. Adult ♀ P. Fairbank, Arizona. W. W. Price.
2–5. Adult — Pres. Casas Grandes, State of Chihuahua, Mexico. V. S. Kennedy.
6. Adult ♀ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

b. *Urocyon cinereo-argenteus texensis* Mearns.

Urocyon cinereo-argenteus texensis Mearns, Proc. U. S. N. Mus., XX, 1897, p. 459. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 308. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 478. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 386. Zoöl. Ser.

TEXAS GRAY FOX.

1. Adult ♂ P. Ciudad, State of Durango, Mexico. A. Forrer.

c. *Urocyon cinereo-argenteus californicus* Mearns.

Urocyon cinereo-argenteus californicus Mearns, Proc. U. S. Nat. Mus., XX, 1897, p. 459. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 308. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 477. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 387. Zoöl. Ser.

CALIFORNIA GRAY FOX.

1. Adult ♂ Coll. Mendocino, California. E. Heller.
2. Adult ♀ P. Marin County, California. C. K. Worthern.
3. Adult — P. Nicasio, California. C. K. Worthern.

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4. Adult — Coll. Nicasio, California. E. Heller.
5. Adult ♂ Coll. Hanson Lagoon, Hanson Laguna Mts., Lower California, Mexico. E. Heller.
6. Juv. ♀ Coll. Santa Eulalia, Lower California, Mexico. E. Heller.

d. Urocyon cinereo-argenteus inyoensis Elliot.

Urocyon cinereo-argenteus inyoensis Elliot, Pub. Field Columb. Mus., III, 1904, p. 268. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 387. Zoöl. Ser.

INYO MOUNTAINS GRAY FOX.

1. Adult ♂ Type. Coll. Beveridge Cañon, Inyo Mts., California. E. Heller.
2. Adult ♂ Coll. Inyo Mts., summits E. of Lone Pine, California. E. Heller.

e. Urocyon cinereo-argenteus guatemalæ (Miller).

Urocyon guatemalæ Miller, Proc. Acad. Nat. Scien. Phil., 1899, p. 278.

Urocyon cinereo-argenteus guatemalæ Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 475. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 389. Zoöl. Ser.

GUATEMALAN GRAY FOX.

1. Adult ♂ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.
2–3. Adult ♀ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.
4. Adult — Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.
5. Adult ♂ Coll. Zanatepec, State of Oaxaca, Mexico. Heller & Barber.

f. Urocyon cinereo-argenteus fraterculus Elliot.

Urocyon cinereo-argenteus fraterculus Elliot, Pub. Field Columb. Mus., I, 1896, p. 80. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 475, figs. 87, LXIV. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 389. Zoöl. Ser.

LITTLE GRAY FOX.

1–2. Adult ♂ Type and paratype. Pres. San Felipe, Yucatan. C. B. Cory.

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FIG. XLVIII. UROCYON C. FRATERCULUS. LITTLE GRAY FOX.

727. Urocyon catalinæ Merriam.

Urocyon catalinæ Merr., Proc. Biol. Soc. Wash., XVI, 1903, p. 74. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 389. Zoöl. Ser.

SANTA CATALINA ISLAND GRAY FOX.

1. Adult ♂ Topotype. P. Santa Catalina Island, Santa Barbara Islands, California. J. Rowley.

728. Urocyon aquilus Bangs.

Urocyon aquilus Bangs, Proc. Biol. Soc. Wash., XII, 1898, p. 93.

DARK COLORED GRAY FOX.

1. Adult — P. Bonda, Colombia, S. A. H. H. Smith.

Family V. **Ursidæ. Bears.**

Subfamily I. **Ursinæ.**

Genus 207. **Ursus.**

Ursus Linn., Syst. Nat., I, 1758, p. 47; I, 1766, p. 69. Type *Ursus arctos!* Linnæus.

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Danis Gray, Thos. Ann. Phil., XXVI, 1825, pp. 60, 339.
Thalarctos! Gray, Thos. Ann. Phil., XXVI, 1825, p. 62.
Thalassarctos! Gray, Thos. Ann. Phil., XXVI, 1825, p. 339.
Helarctos! Horsf., Zoöl. Jour., II, 1825, pp. 221–234, pl. VII.
Euarctos! Gray, Proc. Zoöl. Soc., 1864, p. 692.

Subgenus A. **Thalassarctus. Polar Bear.**

729. Ursus maritimus Phipps.

Ursus maritimus Phipps, Voy. N. Pole, 1774, p. 185. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 310, pl. XXXII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies. F. C. M. Pub., VI, 1905, p. 390. Zoöl. Ser.

POLAR BEAR.

1. Adult — P. Greenland. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♂ P. Hudson Bay Region, Arctic America. Thos. Luce & Co., New Bedford, Mass.
3. Adult ♀ P. Hudson Bay Region, Arctic America. Thos. Luce & Co., New Bedford, Mass.

4–5. Juv. — P. Hudson Bay Region, Arctic America. Thos. Luce & Co., New Bedford, Mass.

Subgenus B. **Ursus. Brown Bears.**

730. Ursus middendorffi Merriam.

Ursus middendorffi Merr., Proc. Biol. Soc. Wash., X, 1896, p. 69. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 310. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 390. Zoöl. Ser.

MIDDENDORFF'S, OR ALASKA BROWN BEAR.

1. Adult — Topotype. P. Kadiak Island, Alaska. C. F. Periolat.

2–3. Juv. — Topotype. P. Kadiak Island, Alaska. C. F. Periolat.

Subgenus C. **Danis. Grizzly Bears.**

731. Ursus horribilis Ord.

Ursus horribilis Ord, Guthr. Geog., 2d Am. ed., II, 1815, p. 291, desc. p. 299. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 312, pl. XXXIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 392. Zoöl. Ser.

Ursus horribilis californicus Merr., Proc. Biol. Soc. Wash., X, 1896, p. 76.

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GRIZZLY BEAR.

1. Adult ♂ P. Montana. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♀ P. Montana. Ward's Nat. Scien. Establ., Rochester, N. Y.
3. Juv. — P. Montana. Ward's Nat. Scien. Establ., Rochester, N. Y.
4. Adult ♀ Pres. West border of Yellowstone Nat. Park, Wyoming. Johnston & Ashcroft.

5–7. Juv. — Pres. West border of Yellowstone Nat. Park, Wyoming. Johnston & Ashcroft.

a. *Ursus horribilis horriæus* Baird.

Ursus horribilis var. *horriæus* Baird, Rep. Mex. Bound. Surv., II, Pt. II, 1859, p. 24.

Ursus horribilis horriæus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 312. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 393. Zoöl. Ser.

Ursus horriæus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 480, fig. LXV, pl. XLVII. Zoöl. Ser.

FIG. XLIX. URSUS H. HORRIÆUS. MEXICAN GRIZZLY BEAR.

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MEXICAN GRIZZLY BEAR.

1–3. Adult — Pres. Casas Grandes, State of Chihuahua, Mexico. V. S. Kennedy.

4. Juv. — Pres. Casas Grandes, State of Chihuahua, Mexico. F. M. Stevenson.

Subgenus D. **Euarctus. Black Bears.**

732. Ursus americanus Pallas.

Ursus americanus Pall., Spic. Zool., fasc. XIV, 1780, p. 5. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 313, pl. XXXIV. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 394. Zoöl. Ser.

AMERICAN BLACK BEAR.

1. Juv. — Pres. Near western border of Yellowstone Nat. Park, Wyoming. Johnston & Ashcroft.

2–3. Juv. — (Cinnamon.) P. Minnesota. C. E. Akeley.

4. Adult ♀ P. Wisconsin. C. E. Akeley.

5–6. Juv. — P. Wisconsin. C. E. Akeley.

733. Ursus altifrontalis Elliot.

Ursus altifrontalis Elliot, Pub. Field Columb. Mus., III, 1903, p. 234. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 395. Zoöl. Ser.

NORTHWESTERN BLACK BEAR.

1. Adult ♂ Type. Coll. Shore of Lake Crescent, Clallam County, Washington. D. G. Elliot.

2. Juv. — Paratype. Coll. Shore of Lake Crescent, Clallam County, Washington. D. G. Elliot.

734. Ursus emmonsi (Dall).

Ursus americanus var. *emmonsii* Dall, Science, N. S., II, 1895, p. 87.

Ursus emmonsi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 315. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 397. Zoöl. Ser.

EMMONS'S GLACIER BEAR.

1–2. Adult — P. Mt. St. Elias, Alaska. C. F. Periolat.

3. Adult — Pres. Mt. St. Elias, Alaska. V. S. Kennedy. C. F. Periolat.

735. Ursus tibetanus F. Cuvier.

Ursus thibetanus F. Cuv., Hist. Nat. Mamm., 1824, pl. 213.

Ursus malayanus Hodgs., Jour. Asiat. Soc. Beng., I, 1832, p. 340. (nec Raffles.)

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Ursus torquatus Wagn., Schreb. Säugth., Suppl., II, 1841, p. 144.
Ursus ornatus Günth., Proc. Zoöl. Soc., 1880, p. 443.

TIBETAN BLACK BEAR.

1. Adult ♂ P. Tibet. Rowland Ward & Co.

736. Ursus japonicus Schlegel.

Ursus thibetanus Temm. & Schleg., Faun. Jap., 1850, p. 70, pl. I, fig. 4. (nec F. Cuvier.)
Ursus japonicus Schleg., Handl. Beoef. Dierk., I, 1857, p. 42.

JAPANESE BLACK BEAR.

1. Adult — P. Japan. Ward's Nat. Scien. Establ., Rochester, N. Y.

Subgenus E. **Helarctus. Sun Bears.**

737. Ursus malayanus Raffles.

Ursus malayanus Raffles, Trans. Linn. Soc., XIII, 1822, p. 254.
Helarctos! euryspilus Horsf., Zoöl. Jour., II, 1825, p. 221.
Helarctos! malayanus Horsf., Zoöl. Jour., II, 1825, p. 234.
Ursus malayanus Blanf., Faun. Brit. Ind., Mamm., 1888–1891, p. 199.

MALAY BEAR.

1. Adult — P. Borneo. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult — P. Telok Betong, So. Sumatra. W. Danne.

Family VI. **Procyonidæ. Raccoons, Coatis, etc.**

Subfamily I. **Ælurinæ.**

Genus 208. **Ælurus.**

Ailurus F. Cuv., Hist. Nat. Mamm., V, 1825, livr. L, pl. & text. Type *Ailurus fulgens* F. Cuvier.

738. Ælurus fulgens F. Cuvier.

Ailurus fulgens F. Cuv., Hist. Nat. Mamm., 1825, pl. 203.
Ailurus ochraceus Hodg., Jour. Asiat. Soc. Beng., XVI, Pt. II, 1847, pp. 475, 573, pl. LII, LIII.
Ælurus fulgens Blanf., Faun. Brit. Ind., Mamm., 1888–91, p. 190, figs. 50, 51.

RED CAT-BEAR OR INDIAN RACCOON.

1. Adult — P. "North India." Ward's Nat. Scien. Establ., Rochester, N. Y.

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Subfamily II. **Procyoninæ.**

Genus 209. **Bassariscus.**

Bassariscus Coues, Science, IX, 1887, p. 516. Type *Bassaris astuta* Lichtenstein.

Bassaris Licht., Isis, 1831, p. 512. (nec Hübner, 1816.)

Wagneria Jentink, Notes Leyden Mus., VIII, 1886, p. 129. (nec Rob.-Desv., 1830, Diptera; nec Alenitzin, 1873, Protozoa.)

739. Bassariscus astutus (Lichtenstein).

Bassaris astuta Licht., Isis, 1831, p. 513.

Bassariscus astutus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 316. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 484, figs. 88, LXVI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 397. Zoöl. Ser.

COMMON RACCOON-FOX. *Cacomistl* in Mexico, *Cat Squirrel* in Texas.

1. Adult ♂ P. Pinal County, Oregon. W. E. D. Scott.

FIG. L. BASSARISCUS ASTUTUS. COMMON RACCOON-FOX.

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2. Adult ♀ Coll. Esperanza, State of Puebla, Mexico. Heller & Barber.

a. Bassariscus astutus raptor (Baird).

Bassaris raptor Baird, Rep. U. S. Mex. Bound. Surv., Mamm., II, 1859, p. 19.

Bassariscus flavus oregonus Rhoads, Proc. Acad. Nat. Scien. Phil., 1893, p. 416.

Bassariscus astutus raptor Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 316, pl. XXXV. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 398. Zoöl. Ser.

Bassariscus astutus oregonus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 317. Zoöl. Ser.

ROBBER RACCOON-FOX.

1. Adult — P. Southern California. Ward's Nat. Scien. Establ., Rochester, N. Y.

2–3. Adult ♂ P. Snow Mountains, Colusa County, California. W. W. Price.

4–5. Adult ♀ P. Snow Mountains, Colusa County, California. W. W. Price.

740. Bassariscus albipes Elliot.

Bassariscus albipes Elliot, Pub. Field Columb. Mus., III, 1903, p. 258. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 486. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 399. Zoöl. Ser.

WHITE-FOOTED RACCOON-FOX.

1. Adult ♂ Type. Coll. Near City of Vera Cruz, State of Vera Cruz, Mexico. N. G. Buxton.

Genus 210. **Procyon.**

Procyon Storr, Prodr. Meth. Mamm., 1780, p. 35, Tab. A. Type *Ursus lotor* Linnæus.

Euprocyon Gray, Proc. Zoöl. Soc., 1864, pp. 705–706.

741. Procyon lotor (Linnæus).

Ursus lotor Linn., Syst. Nat., I, 1758, p. 48.

Procyon lotor Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 317, fig. 62. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 400. Zoöl. Ser.

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COMMON RACCOON.

1. Adult — P. New York. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult — Albino. Pres. Wisconsin. E. E. Ayer.
3. Adult — Melanistic form. Pres. Wisconsin. E. E. Ayer.
4. Adult ♂ Exch. Hastings, New York. Am. Mus. Nat. Hist. N. Y. J. Rowley.
5. Adult ♀ Pres. White Sulphur Springs, West Virginia. T. Surber.
6. Adult ♂ Coll. Black Mountain, West Virginia. T. Surber.

7–8. Adult ♀ Coll. Black Mountain, West Virginia. T. Surber.
9–10. Adult ♂ Coll. New Berlin, Florida. T. Surber.
11–12. Adult ♀ Coll. New Berlin, Florida. T. Surber.
13. Adult ♂ Coll. St. Marys, Georgia. T. Surber.
14. Adult — Pres. Jackson Park, Chicago. Shelby, Museum Guard.

a. Procyon lotor hernandezi (Wagler).
Procyon hernandezii Wagler, Isis, 1831, p. 514.
Procyon nivea Gray, Charlesw. Mag. Nat. Hist., I, 1837, p. 580.
Procyon psora Gray, Ann. Mag. Nat. Hist., 1st Ser., 1842, p. 261.
Procyon lotor hernandezi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 317. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 491, fig. LXVII.

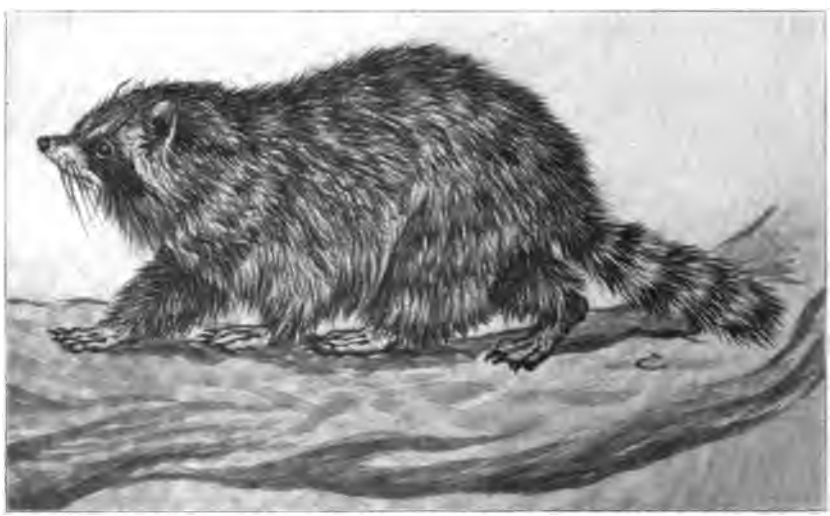

FIG. LI. PROCYON L. HERNANDEZI. HERNANDEZ'S RACCOON.

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pl. L. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 401. Zoöl. Ser.

HERNANDEZ'S RACCOON.

1. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.
2–3. Adult ♀ Coll. Puente de Ixtla, State of Morelos, Mexico. F. E. Lutz.
4. Adult ♂ Coll. Puente de Ixtla, State of Morelos, Mexico. F. E. Lutz.
5. Adult ♀ Coll. Oro Grande, Mohave Desert, California. E. Heller.
6. Adult ♀ Coll. Palm Springs, California. E. Heller.
7–8. Adult ♂ P. Presidio Propriae, Mazatlan, State of Sinaloa, Mexico. A. Forrer.
9. Adult ♂ Coll. Xico, State of Vera Cruz, Mexico. N. G. Buxton.
10. Adult ♀ Coll. Xico, State of Vera Cruz, Mexico. N. G. Buxton.
11–16. Adult ♀ Coll. Sabinas, State of Coahuila, Mexico. Heller & Barber.
17–19. Adult — Coll. Sabinas, State of Coahuila, Mexico. Heller & Barber.
20. Adult ♀ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.

Genus 211. **Nasua. Coatis.**

Nasua Storr, Prodr. Meth. Mamm., 1780, p. 35. Type *Viverra nasua* Linnæus.

742. Nasua nasica (Linnæus).

Viverra narica (sic) Linn., Syst. Nat., I, 1766, p. 64.

Nasua nasica Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 497, figs. 91, LXVIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 402. Zoöl. Ser.

COATI. *Pisoti, Tejon*, in Spanish America

1. Adult — P. State of Vera Cruz, Mexico. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult — P. "Central America." Ward's Nat. Scien. Establ., Rochester, N. Y.
3–6. Adult ♂ P. Mazatlan, State of Sinaloa, Mexico. A. Forrer.
7. Juv. ♂ P. Mazatlan, State of Sinaloa, Mexico. A. Forrer.

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FIG. LII. NASUA NASICA. COATI.

8–9. Adult ♀ P. Mazatlan, State of Sinaloa, Mexico. A. Forrer.
10–11. Adult — P. Mazatlan, State of Sinaloa, Mexico. A. Forrer.
12–13. Adult ♂ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.
14–15. Adult ♀ Coll. Reforma, State of Oaxaca, Mexico. Heller & Barber.
16. Adult ♂ Coll. Zanatepec, State of Oaxaca, Mexico. Heller & Barber.
17. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
18. Juv. ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

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Genus 212. **Potos. Kinkajous.**

Potos Cuv. & Geoff., Méth. Mamm., Mag. Encyl., II, 1795, p. 187. Type *Viverra caudivolvula* Schreber.

Cercoleptes Illig., Prodr. Syst. Mamm. et Av., 1811, p. 127.

743. Potos flavus (Schreber).

Viverra flava Schreb., Säugth., I, 1775, p. 145.

Viverra caudivolvula Schreb., Säugth., III, 1777, p. 453, pl. 125.

KINKAJOU.

1. Adult — P. "Central America"! Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult — Pres. ——— ? Lincoln Park Menagerie, Chicago.

a. Potos flavus chiriquensis Allen.

Potos flavus chiriquensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1904, p. 72. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 501. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 404. Zoöl. Ser.

CHIRIQUI KINKAJOU.

1–3. Adult ♂ Paratypes. P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

4–6. Adult ♀ Paratypes. P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

FIG. LIII. POTOS FLAVUS. THE KINKAJOU.

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b. Potos flavus megalotus (Martin).
Cercoleptes megalotus Martin, Proc. Zoöl. Soc., 1836, p. 81.
Potos flavus megalotus Thos., Ann. Mag. Nat. Hist., 7th Ser., IX, 1902, p. 266.
MARTIN'S KINKAJOU.
1. Adult — P. Bonda, Colombia, South America. H. H. Smith.

Family VII. **Mustelidæ. Badgers, Weasels, Otters, etc.**

Subfamily I. **Melinæ.**

Genus 213. **Taxidea. Badgers.**

Taxidea Waterh., Proc. Zoöl. Soc., 1838, pp. 153–154. Type *Ursus labradorius* Gmelin = *Ursus taxus* Schreber.

744. Taxidea taxus (Schreber).
Ursus taxus Schreb., Säugth., III, 1778, p. 520, pl. CXLII B.
Meles taxus var. *B americanus* Bodd., Elench. Anim., I, 1785, p. 136.
Ursus labradorius Gmel., Syst. Nat., I, 1788, p. 102.
Meles jeffersoni Harl., Faun. Am., 1825, p. 309.
Taxidea americana Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 320, fig. 63. Zoöl. Ser.
Taxidea taxus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 404. Zoöl. Ser.
AMERICAN BADGER.
1. Adult ♂ P. Rocky Ford, Otero County, Colorado. B. F. Baymer.
2. Adult ♀ P. Rocky Ford, Otero County, Colorado. B. F. Baymer.
3. Adult — P. Rocky Ford, Otero County, Colorado. B. F. Baymer.
4. Adult ♀ P. Buffalo Lake, Alberta, Canada. G. F. Dippie.
5. Adult ♂ P. Calgary, Alberta, Canada. G. F. Dippie.
6. Adult ♂ Coll. Jamestown, North Dakota. W. E. Snyder.

a. Taxidea taxus neglecta (Mearns).
Taxidea americana neglecta Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 250. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 321. Zoöl. Ser.
Taxidea taxus neglecta Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 405. Zoöl. Ser.

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CALIFORNIA BADGER.

1. Adult ♂ Coll. Mt. Whitney, California. E. Heller.

b. Taxidea taxus berlandieri (Baird).

Taxidea berlandieri Baird, N. Am. Mamm., 1857, p. 205.

Taxidea americana berlandieri Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 321. Zoöl. Ser.

Taxidea taxus berlandieri Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 500, figs. 93, LXX. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 405. Zoöl. Ser.

FIG. LIV. TAXIDEA T. BERLANDIERI. BERLANDIER'S BADGER.

BERLANDIER'S BADGER.

1. Adult ♀ Coll. Alva, Oklahoma Territory. T. Surber.

Genus 214. **Mydaus.**

Mydaus F. Cuv., Hist. Nat. Mamm., III, 1821, pl. & text. Type *Mydaus meliceps* F. Cuvier.

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745. Mydaus marchii Huet.

Mydaus marchei Huet, Le Naturaliste, 1887, p. 149, fig. 1.

Mydaus schadenbergii Jentink, Notes Leyden Museum, 1895, p. 46, fig. p. 45.

MARCHE'S BADGER.

1. Adult ♂ P. Philippines. Bourns & Worcester.

Genus 215. **Meles.**

Meles Briss., Regn. Anim., 2d ed., 1762, p. 183. Type *Meles meles* Brisson=*Ursus meles* Linnæus.

746. Meles meles (Linnæus).

Ursus meles Linn., Syst. Nat., 1, 1758, p. 48; 1, 1766, p. 70.

Meles taxus Bodd., Elench. Anim., 1, 1785, p. 80.

Meles europaeus Desm., Nouv. Dict. Hist. Nat., III, 1820, p. 465.

EUROPEAN BADGER.

1. Adult — P. Germany. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 216. **Mephitis. Skunks.**

Mephitis Cuv., Leçons d'anat. Comp., Class Mamm., 1, 1800, Tabl. 1. Type "*Les Moufettes.*"

Chincha Less., Nouv. Tabl. Règn. Anim., 1842, p. 67.

Leucomitra Howell, N. Am. Faun., No. 20, 1901, p. 39, pls. IV, VIII.

Subgenus A. **Chincha. Large-striped Skunks.**

747. Mephitis mephitis (Schreber).

Viverra mephitis Schreb., Säugth., III, 1778, p. 444, Tab. 121.

Mephitis mephitica Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 322, fig. 64. Zoöl. Ser. (Part.)

Mephitis mephitis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 406. Zoöl. Ser.

CANADA SKUNK.

1. Adult ♂ Coll. White Sulphur Springs, West Virginia. T. Surber.

2–3. Adult ♂ Exch. Hastings, N. Y. Am. Mus. Nat. Hist. N. Y. J. Rowley.

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4. Adult ♂ Coll. Murray Bay, Quebec, Canada. T. Surber.
5. Adult ♀ Coll. Murray Bay, Quebec, Canada. T. Surber.
6–7. Adult — P. Ontario, Canada. G. F. Dippie.
8–9. Adult — Coll. Park Siding, Iron County, Michigan. C. E. Akeley.
10–13. Adult ♂ P. Green Bay, Wisconsin. A. Shubert.
14–20. Adult ♀ P. Green Bay, Wisconsin. A. Shubert.
21–22. Adult — P. Pewaukee, Wisconsin. C. E. Akeley.

748. Mephitis hudsonia (Richardson).

Mephitis americana var. *hudsonica* Rich., Faun. Bor. Amer., Mamm., I, 1829, p. 55.

Mephitis mephitica hudsonia Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 322. Zoöl. Ser.

Mephitis hudsonia Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 406. Zoöl. Ser.

NORTHERN PLAINS SKUNK.

1. Adult — P. "Montana." Ward's Nat. Scien. Establ., Rochester, N. Y.

749. Mephitis olida Boitard.

Mephitis putida G. Cuv., Tab. Élém. Hist. Nat. Anim., 1798, pp. 116, 117. (Indeterminable.) Boitard, Jard. Plantes Paris, Mamm., 1842, p. 147. (Untenable.)

Mephitis olida Boitard, Jard. Plantes Paris, Mamm., 1842, p. 147.

Mephitis fetidissima Boitard, Jard. Plantes Paris, Mamm., 1842, p. 147.

Mephitis mephitica Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 322. Zoöl. Ser. (Part.)

Mephitis olida Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 406. Zoöl. Ser.

EASTERN SKUNK.

1. Adult — P. New York. Ward's Nat. Scien. Establ., Rochester, N. Y.

750. Mephitis elongata (Bangs).

Mephitis mephitica elongata Bangs, Proc. Bost. Soc. Nat. Hist., 1895, p. 531.

Mephitis elongata Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 324. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 406. Zoöl. Ser.

FLORIDA SKUNK.

1. Adult ♂ Coll. Enterprise, Florida. T. Surber.

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a. Mephitis mesomelas avia (Bangs).

Mephitis avia Bangs, Proc. Biol. Soc. Wash., XII, 1898, p. 32. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 327. Zoöl. Ser.

Mephitis mesomelas avia Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 407. Zoöl. Ser.

ILLINOIS SKUNK.

1. Adult ♂ P. Lawrence, Kansas. J. Rowley.

b. Mephitis mesomelas varians (Gray).

Mephitis varians Gray, Charlesw. Mag. Nat. Hist., I, 1837, p. 581.

Mephitis mesomelas Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 325. Zoöl. Ser. (nec Licht.)

Mephitis mesomelas varians Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 467. Zoöl. Ser.

LONG-TAILED TEXAN SKUNK.

1–2. Adult ♀ Coll. Alva, Oklahoma Territory. T. Surber.
3. Adult ♂ P. Boulder, Colorado. R. T. Young.

751. Mephitis estor Merriam.

Mephitis estor Merr., N. Am. Faun., No. 3, 1890, p. 81. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 326. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 407. Zoöl. Ser.

Mephitis mesomelas estor Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 509. Zoöl. Ser.

ARIZONA SKUNK.

1–2. Adult ♂ Exch. Pinal County, Arizona. Am. Mus. Nat. Hist. N. Y. W. E. D. Scott.
3. Adult ♀ Exch. Prescott, Arizona. Am. Mus. Nat. Hist. N. Y. W. E. D. Scott.
4. Adult ♀ P. Santa Catalina Mts., Arizona. W. W. Price.

752. Mephitis occidentalis Baird.

Mephitis occidentalis Baird, N. Am. Mamm., 1857, p. 194. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 324. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 408. Zoöl. Ser.

CALIFORNIA SKUNK.

1. Adult ♀ Coll. Point Reyes, California. E. Heller.
2–4. Adult ♂ Coll. Requa, California. E. Heller.
5–6. Adult ♀ Coll. Requa, California. E. Heller.
7. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.

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a. Mephitis occidentalis spissigrada (Bangs).

Mephitis spissigrada Bangs, Proc. Biol. Soc. Wash., XII, 1898, p. 31. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 326. Zoöl. Ser.

Mephitis fœtulenta Elliot, Pub. Field Columb. Mus., I, 1899, p. 269. Zoöl. Ser. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 326. Zoöl. Ser.

Mephitis occidentalis spissigrada Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 408. Zoöl. Ser.

PUGET SOUND SKUNK.

1–6. Adult — Coll. Port Angeles, Washington. D. G. Elliot.

b. Mephitis occidentalis holzneri Mearns.

Mephitis occidentalis holzneri Mearns, Proc. U. S. Nat. Mus., XX, 1897, p. 461. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 507, fig. 94. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 409. Zoöl. Ser.

LOWER CALIFORNIA SKUNK.

1. Adult ♂ Coll. Oro Grande, Mohave Desert, California. E. Heller.

2–3. Adult ♀ Coll. Oro Grande, Mohave Desert, California. E. Heller.

753. Mephitis platyrhina (Howell).

Chincha platyrhina Howell, N. Am. Faun., No. 20, 1901, p. 39.

Mephitis platyrhina Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 409. Zoöl. Ser.

BROAD-NOSED SKUNK.

1. Adult ♂ Coll. Lone Pine, Inyo County, California. E. Heller.

Subgenus B. Leucomitra. Hooded Skunks.

754. Mephitis macrura Lichtenstein.

Mephitis macroura Licht., Darst. neuer oder wenig bekann. Säugeth., 1832, pl. XLVI.

Mephitis macrura Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 510, figs. 95, LXXI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 410. Zoöl. Ser.

HOODED SKUNK.

1. Adult ♂ Coll. Ocotlan, State of Jalisco, Mexico. F. E. Lutz.

2. Adult ♀ Coll. Ocotlan, State of Jalisco, Mexico. F. E. Lutz.

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3. Adult ♂ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber.
4. Adult ♂ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.
5. Adult ♀ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

a. Mephitis macrura milleri (Mearns).
Mephitis milleri Mearns, Proc. U. S. Nat. Mus., xx, 1897, p. 467.

FIG. LV. MEPHITIS MACRURA. HOODED SKUNK.

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Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 325. Zoöl. Ser.

Mephitis macrura milleri Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 511. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 410. Zoöl. Ser.

MILLER'S SKUNK.

1–3. Juv. ♀ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

Genus 217. **Conepatus.**

Conepatus Gray, Charlesw. Mag. Nat. Hist., 1837, p. 581. Type *Conepatus humboldtii* Gray.

Marputius Gray, Charlesw. Mag. Nat. Hist., 1837, p. 581.

Thiosmus Licht., Abh. K. Akad. Wiss. Berl., 1838, p. 270.

Ozolictis Glog., Hand-u. Hilfsb. Naturg., 1841, p. 57.

Rhinozolis Glog., Hand-u. Hilfsb. Naturg., 1841, p. 58.

Oryctogale Merr., Proc. Biol. Soc. Wash., XV, 1902, p. 161.

Subgenus A. **Conepatus.**

755. Conepatus leuconotus (Lichtenstein).

Mephitis leuconota Licht., Darst. neuer oder wenig bekann. Säugeth., 1832, text, pl. XLIV, fig. 1.

Conepatus leuconotus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 515. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 411. Zoöl. Ser.

WHITE-SPOTTED SKUNK.

1. Adult ♂ Coll. Zanatepec, State of Oaxaca, Mexico. Heller & Barber.

a. Conepatus mesoleucus mearnsi Merriam.

Conepatus mapurito Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, Suppl., p. 510, pl. LVI. Zoöl. Ser. (nec Gmelin.)

Conepatus mesoleucus mearnsi Merr., Proc. Biol. Soc. Wash., XV, 1902, p. 163. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 516, figs. 96, LXXII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 411. Zoöl. Ser.

MEARNS'S SKUNK.

1. Adult ♂ Exch. Pinal County, Arizona. Am. Mus. Nat. Hist. N. Y. W. E. D. Scott.

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FIG. LVI. CONEPATUS M. MEARNSI. MEARNS'S SKUNK.

Subgenus B. **Marputius.**

756. Conepatus tropicalis Merriam.

Conepatus tropicalis Merr., Proc. Biol. Soc. Wash., XV, 1902, p 164. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 517, fig. 97. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905. p. 412. Zoöl. Ser.

MOTZORONGO SKUNK.

1. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

Genus 218. **Spilogale. Little Spotted Skunks.**

Spilogale Gray, Proc. Zoöl. Soc., 1865, p. 150. Type *Mephitis interrupta* Rafinesque.

757. Spilogale interrupta (Rafinesque).

Mephitis interrupta Rafin., Ann. Nat., I, 1820, p. 3.

Mephitis bicolor Gray, Charlesw. Mag. Nat. Hist., I, 1837, p. 581.

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Mephitis quaterlinearis Winans, in Coues, Fur-bear. Anim., 1877, p. 239.

Spilogale interrupta Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 328. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 523, figs. 98, LXXIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 412. Zoöl. Ser.

FIG. LVII. SPILOGALE INTERRUPTA. WHITE-SPOTTED SKUNK.

WHITE-SPOTTED SKUNK.

1–4. Adult ♂ Coll. Alva, Oklahoma Territory. T. Surber.
5. Adult ♀ Coll. Alva, Oklahoma Territory. T. Surber.
6–7. Adult ♂ P. Lawrence, Kansas. J. Rowley.
8. Adult ♀ P. Lawrence, Kansas. J. Rowley.

758. Spilogale ringens Merriam.

Spilogale ringens Merr., N. Am. Faun., No. 4, 1890, p. 9. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 329. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 413. Zoöl. Ser.

GROWLING SPOTTED SKUNK.

1. Adult ♀ Topotype. Exch. Greensboro, Alabama. Am. Mus. Nat. Hist. N. Y. W. C. Avery.

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759. Spilogale indianola Merriam.

Spilogale indianola Merr., N. Am. Faun., No. 4, 1890, p. 10. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 329. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 413. Zoöl. Ser.

INDIANOLA SPOTTED SKUNK.

1. Adult ♂ Exch. Rockford, Texas. Am. Mus. Nat. Hist. N. Y. H. D. Attwater.

760. Spilogale tenuis Howell.

Spilogale tenuis Howell, Proc. Biol. Soc. Wash., XV, 1902, p. 241. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 413. Zoöl. Ser.

SLENDER SPOTTED SKUNK.

1. Adult ♂ P. Boulder, Colorado. R. T. Young.

761. Spilogale phenax Merriam.

Spilogale phenax Merr., N. Am. Faun., No. 4, 1890, p. 13. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 331. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 414. Zoöl. Ser.

CHEATING SPOTTED SKUNK.

1. Adult ♂ P. Snow Mts., Colusa County, California. W. W. Price.
2. Adult ♀ Topotype. Exch. Nicasio, California. Am. Mus. Nat. Hist. N. Y. C. A. Allen.
3–6. Adult ♂ Coll. Petaluma, California. E. Heller.
7–8. Adult ♀ Coll. Petaluma, California. E. Heller.
9. Adult ♂ Coll. Fort Tejon, California. E. Heller.
10. Adult ♂ Coll. Gardiner, Oregon. E. Heller.
11–12. Adult ♂ Coll. Marshfield, Oregon. E. Heller.

a. Spilogale phenax latifrons Merriam.

Spilogale phenax latifrons Merr., N. Am. Faun., No. 4, 1890, p. 15. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 331. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 414. Zoöl. Ser.

BROAD-HEADED SPOTTED SKUNK.

1. Adult — P. "Tacoma," Washington. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♂ Coll. Marshfield, Oregon. E. Heller.
3. Adult ♀ Coll. Marshfield, Oregon. E. Heller.
4–5. Adult ♂ Coll. Gardiner, Oregon. E. Heller.
6–7. Adult ♀ Coll. Gardiner, Oregon. E. Heller.

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8–9. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
10. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.
11–12. Adult ♂ Coll. Beaverton, Oregon. E. Heller.
13. Adult ♀ Coll. Beaverton, Oregon. E. Heller.

a. Spilogale arizonæ martirensis Elliot.

Spilogale arizonæ martirensis Elliot, Pub. Field Columb. Mus., III, 1903, p. 170. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 521. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 414. Zoöl. Ser.

SAN PEDRO MARTIR SPOTTED SKUNK.

1–2. Adult ♂ Type and paratype. Coll. Vallecitos, San Pedro Martir Mts., Lower California, Mexico. E. Heller.

762. Spilogale olympica Elliot.

Spilogale olympica Elliot, Pub. Field Columb. Mus., I, 1899, p. 270. Zoöl. Ser. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 332. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 415. Zoöl. Ser.

OLYMPIC MOUNTAINS SPOTTED SKUNK.

1. Adult ♂ Type. Coll. Port Angeles, Washington. D. G. Elliot.
2–6. Adult — Paratypes. Coll. Port Angeles, Washington. D. G. Elliot.

763. Spilogale ambarvalis Bangs.

Spilogale ambarvalis Bangs, Proc. Bost. Soc. Nat. Hist., 1898, p. 222. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 332. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 415. Zoöl. Ser.

FIELD SPOTTED SKUNK.

1. Adult ♂ Coll. Micco, Florida. T. Surber.
2. Adult ♂ Topotype. Coll. Oak Lodge, Florida. T. Surber.

764. Spilogale gracilis Merriam.

Spilogale gracilis Merr., N. Am. Faun., No. 4, 1890, p. 83. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 330. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 415. Zoöl. Ser.

GRACEFUL SKUNK.

1–3. Adult ♂ Coll. Beveridge Cañon, Inyo Mts., California. E. Heller.

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4–6. Adult ♀ Coll. Beveridge Cañon, Inyo Mts., California. E. Heller.
7. Adult ♂ Exch. Pinal County, Arizona. Am. Mus. Nat. Hist. N. Y. W. E. D. Scott.
8. Adult ♀ P. Huachuca Mts., Arizona. W. W. Price.

Subfamily II. **Mustelinæ.**

Genus 219. **Gulo. Wolverine.**

Gulo Frisch, Das Nat.-Syst. vierfüss. Thiere, in Tabellen, 17, Tab. Gen., 1775. Type *Mustela gulo* Linnæus.

765. Gulo luscus (Linnæus).

Ursus luscus Linn., Syst. Nat., I, 1758, p. 47.

Gulo luscus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 333. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 416. Zoöl. Ser.

WOLVERINE.

1. Adult — P. Canada. Ward's Nat. Scien. Establ., Rochester, N. Y.
2–4. Adult — P. Canterbury Station, New Brunswick, Canada. C. F. Periolat.

766. Gulo luteus Elliot.

Gulo luteus Elliot, Pub. Field Columb. Mus., III, 1903, p. 200. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 417. Zoöl. Ser.

BUFF-COLORED WOLVERINE.

1. Adult — Pres. Yakutat, Alaska. T. Trelease.
2. Juv. ♂ Type. Coll. Mt. Whitney, California. E. Heller.

767. Gulo hylæus Elliot.

Gulo hylæus Elliot, Proc. Biol. Soc. Wash., XVIII, 1905, p. 81. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 417. Zoöl. Ser.

MOUNT MCKINLEY WOLVERINE.

1–6. Adult — Type and paratypes. P. Sushitna River, Mt. McKinley Region, Alaska. C. F. Periolat.

Genus 220. **Galera. The Grisons.**

Galera Browne, Civil and Naval Hist. Jamaica, 2d ed., 1789. p. 485. Type *Mustela barbara* Linnæus.

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Grison Oken, Lehrb. der Naturg., Zool., II, 1816. pp. XI, 1000.
Tayra Oken, Lehrb. der Naturg., Zool., II, 1816, p. 1001.
Grisonia Gray, Thos. Ann. Phil., XXVI, 1825, p. 339.
Laira F. Cuv., Hist. Nat. Mamm., V, 1826, livr. XLV.
Galictis Bell, Zoöl. Jour., II, 1826, p. 551.
Galidictis I. Geoff., Mag. Zool., Mamm., 1839, p. 32.

Sugbenus A. **Tayra.**

768. Galera barbara (Linnæus).
Mustela barbara Linn., Syst. Nat., I, 1758, p. 46; I, 1766, p. 67.
Viverra poliocephala Traill, Mem. Wern. Soc., III, p. 440, pl. XXII.
SOUTH AMERICAN GRISON.
1. Adult — P. Rio Janeiro, South America. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Galera barbara irara (Allen).
Tayra barbara irara Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1904, p. 37.
COLOMBIAN GRISON.
1. Adult — P. Minca, Colombia, South America. H. H. Smith.
2. Adult — P. Don Diego, Colombia, South America. H. H. Smith.

Genus 221. **Mustela. Martens or Sables, Fishers.**

Mustela Linn., Syst. Nat., I, 1758, p. 45; I, 1766, p. 66. Type *Mustela martes* Linnæus.

769. Mustela americana Turton.
Mustela martes Forst., Phil. Trans., 1772, p. 372. (nec Linn.)
Mustela zibellina Pall., Spicil. Zool., XIV, 1780?, p. 57. *Id.* Zoog. Rosso-Asiat., I, 1831, p. 84. (nec Linn.)
Mustela americanus Turton, Linn. Syst. Nat., I, 1806, p. 60.
Mustela vulpina Rafin., Am. Jour. Scien., I, 1819, p. 82.
Mustela leucopus Kuhl, Beitr. Zool. u. Anat., 1820, p. 74.
Mustela huro F. Cuv., Dict. Scien. Nat., XXIX, 1823, p. 256.
Mustela americana Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 334, fig. 66. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 419. Zoöl. Ser.
AMERICAN MARTEN, HUDSON BAY SABLE.
1. Adult — P. Montana. Ward's Nat. Scien. Estab., Rochester, N. Y.

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2–3. Adult ♀ Exch. Trousers Lake, New Brunswick. Am. Mus. Nat. Hist. N. Y. J. Rowley.
4. Adult ♂ P. Haliburton County, Ontario, Canada. G. F. Dippie.
5. Adult ♀ P. Haliburton County, Ontario, Canada. G. F. Dippie.
6. Adult ♂ P. French River, Georgian Bay, Ontario, Canada. G. F. Dippie.
7. Adult — P. Florence County, Wisconsin. C. E. Akeley.

a. Mustela americana actuosa Osgood.

Mustela americana actuosa Osgood, N. Am. Faun., No. 19, 1900, p. 43. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 336. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 420. Zoöl. Ser.

ACTIVE MARTEN.

1–10. Adult — P. Unalaklik, Alaska. C. F. Periolat.

770. Mustela boria Elliot.

Mustela boria Elliot, Proc. Biol. Soc. Wash., XVIII, 1905, p. 139. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 421. Zoöl. Ser.

FARTHEST NORTH MARTEN.

1–5. Adult — Type and paratypes. P. Lower Mackenzie River District, Alaska. C. F. Periolat.

771. Mustela kenaiensis (Elliot).

Mustela americana kenaiensis Elliot, Pub. Field Columb. Mus., III, 1903, p. 151, pl. XXXII. Zoöl. Ser.

Mustela kenaiensis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 421. Zoöl. Ser.

KENAI PENINSULA MARTEN.

1–6. Adult — Type and paratypes. P. Kenai Peninsula, Alaska. C. F. Periolat.

a. Mustela caurina origenes Rhoads.

Mustela caurina origenes Rhoads, Proc. Acad. Nat. Scien. Phil., 1902, p. 458. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 422. Zoöl. Ser.

ROCKY MOUNTAIN MARTEN.

1. Adult ♂ P. Boulder County, Colorado. R. T. Young.
2–4. Adult ♀ P. Boulder County, Colorado. R. T. Young.

772. Mustela canadensis Schreber.

Mustela canadensis Schreb., Säugth., III, 1778, p. 492, pl. CXXIV,

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1776. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 422. Zoöl. Ser.

Mustela pennanti Erxl., Syst. Regn. Anim., 1777, p. 470. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 337. Zoöl. Ser.

Mustela melanorhyncha Bodd., Elench. Anim., 1785, p. 88.

Viverra piscator Shaw, Gen. Zoöl., I, 1800, p. 414.

Mustela nigra Turton, Linn. Syst. Nat., I, 1806, p. 60.

Mustela godmani Fisch., Syn. Mamm., 1829, p. 217.

PENNANT'S FISHER.

1. Adult — P. Maine. Ward's Nat. Scien. Establ., Rochester, N. Y.

2–3. Adult — P. Park Siding, Michigan. Rheinbold.

4. Adult ♂ P. Amasa, Iron County, Michigan. C. E. Akeley.

a. Mustela canadensis pacifica Rhoads.

Mustela canadensis pacifica Rhoads, Trans. Am. Philos. Soc., 1898, p. 435. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 423. Zoöl. Ser.

Mustela pennanti pacifica Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 337. Zoöl. Ser.

PACIFIC FISHER.

1. Adult ♂ Coll. Solduc Trail, Olympic Mts., Washington. D. G. Elliot.

2. Adult ♀ Coll. Barnes Creek, Lake Crescent, Washington. D. G. Elliot.

773. Mustela foina Erxleben.

Mustela foina Erxl., Syst. Regn. Anim., 1777, p. 458.

BEECH MARTEN.

1. Adult — P. Europe. Ward's Nat. Scien. Establ., Rochester, N. Y.

774. Mustela flavigula Boddaert.

Mustela flavigula Bodd., Elench. Anim., 1785, p. 88.

Martes flavigula Blyth, Jour. Asiat. Soc. Beng., XXVI, p. 316.

Galidictis chrysogaster Jard., Nat. Lib., XIII, 1842, p. 167, pl. VII.

INDIAN MARTEN.

1. Adult — P. India. Ward's Nat. Scien. Establ., Rochester, N. Y.

775. Mustela henrici Westermann.

Mustela henrici Westerm., Bydr. Dierk., I, 1849, p. 13, pl. I.

EAST INDIES MARTEN.

1. Adult — P. Sumatra. Ward's Nat. Scien. Establ., Rochester, N. Y.

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776. Mustela melampus Temminck.

Mustela melampus Temm., Faun. Japon., 1842, p. 31, pl. VII, figs. 3–4.

Martes melanopus Gray, Proc. Zoöl. Soc., 1865, p. 105.

JAPANESE MARTEN.

1. Adult — P. Japan. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 222. **Putorius. Mink, Weasels.**

Putorius Frisch, Das Nat.-Syst. vierfüss. Thiere, in Tabellen, XI, Tab. Gen., 1775. Type *Mustela putorius* Linnæus.

Arctogale Kaup, Entw.-Gesch. Nat. Syst. der Europ. Thierw., I, 1829, p. 30. (nec Peters.)

Ictis Kaup, Entw.-Gesch. Nat. Syst. der Europ. Thierw., I, 1829, p. 40.

Gale Wagn., Schreb. Säugth., Suppl., II, 1841, p. 234.

Lutreola Wagn., Schreb. Säugth., Suppl., II, 1841, p. 239.

Vison Gray, List Spec. Mamm. Brit. Mus., 1843, p. 64.

Neogala Gray, Proc. Zoöl. Soc., 1865, p. 114.

Cynomyonax (sic) Coues, Fur-bear. Anim., 1877, p. 147.

Subgenus A. **Lutreola. Mink.**

777. Putorius vison (Schreber).

Mustela lutreola Forst., Phil. Trans., LXII, 1772, p. 371. (nec Linn.)

Mustela vison Schreb., Säugth., III, 1777, p. 463.

Mustela canadensis Erxl., Syst. Regn. Anim., I, 1777, p. 455. (nec *M. l. canadensis* Schreber, 1777.)

Mustela winingus Barton, Am. Phil. Trans., VI, 1809, p. 70.

Mustela minx Ord, Guth. Geog., 2d Amer. ed., II, 1815, p. 291.

Mustela lutreocephala Harl., Faun. Amer., 1825, p. 63.

Putorius nigrescens Aud. & Bach., Quad. N. Amer., III, 1853, p. 104, pl. CXXIV.

Putorius vison Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 338, fig. 67. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 423. Zoöl. Ser.

Putorius vison lutreocephalus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 339. Zoöl. Ser.

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COMMON MINK.

1. Adult — P. New York. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult — Pres. Hicksville, Ohio. H. Meek.
3. Adult ♂ P. Winnipeg, Manitoba. C. K. Worthern.
4. Adult — Pres. Park Siding, Michigan. C. E. Akeley.
5. Adult ♂ P. Branchtown, Ontario, Canada. G. F. Dippie.
6. Adult ♀ P. Branchtown, Ontario, Canada. G. F. Dippie.
7. Adult ♂ Exch. Trousers Lake, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. J. Rowley.
8. Adult ♀ Exch. Trousers Lake, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. J. Rowley.
9. Adult ♂ Coll. Lake Edward, Quebec, Canada. T. Surber.
10. Adult ♀ Coll. Lake Edward, Quebec, Canada. T. Surber.
11. Adult ♀ P. Red Deer, Alberta, Canada. G. F. Dippie.
12. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
13. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.

14–15. Adult ♂ P. White Sulphur Springs, West Virginia. T. Surber.

16. Adult ♂ Coll. Calhoun Falls, South Carolina. T. Surber.
17. Adult ♂ Coll. Pres. Dowagiac, Michigan. C. L. Dewey.

a. *Putorius vison energumenus* Bangs.

Putorius vison energumenos! Bangs, Proc. Bost. Soc. Nat. Hist., 1896, p. 5.

Putorius vison energumenus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 340. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 424. Zoöl. Ser.

DEVILISH MINK.

1–3. Adult — Coll. Port Angeles, Washington. D. G. Elliot.

778. Putorius melampeplus (Elliot).

Putorius vison melampeplus Elliot, Pub. Field Columb. Mus., III, 1903, p. 170. Zoöl. Ser.

Putorius melampeplus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 425. Zoöl. Ser.

DARK-HUED MINK.

1. Adult ♂ Type. P. Kenai Peninsula, Alaska. C. F. Periolat.

2–3. Adult — Paratypes. P. Kenai Peninsula, Alaska. C. F. Periolat.

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Subgenus B. **Cynomyanax.**

779. Putorius nigripes Audubon & Bachman.

Putorius nigripes Aud. & Bachm., Quad. N. Am., II, 1851, p. 297. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 341, fig. 68. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 425. Zoöl. Ser.

BLACK-FOOTED MINK.

1. Adult ♀ P. Gleichen, Alberta, Canada. G. F. Dippie.

Subgenus C. **Arctogale. Weasels.**

780. Putorius cicognani (Bonaparte).

Mustela (*Putorius*) *vulgaris* Rich., Faun. Bor. Amer., Mamm., I, 1829, p. 45. (nec Brisson.)

Mustela cicognanii Bonap., Iconog. Faun. Ital., I, fasc. XXII, 1838, p. 4.

Putorius cicognani Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 344, fig. 69. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 426. Zoöl. Ser.

COMMON WEASEL.

1. Adult — Pres. Fort Sheridan, Illinois. H. K. Coales.
2. Adult — Pres. Tomahawk Lake, Wisconsin. H. T. Chace.
3. Adult ♂ Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

4–5. Adult ♂ P. Aitkin, Minnesota. C. K. Worthern.

6. Adult ♂ P. Chilliwack, British Columbia, Canada. G. F. Dippie.
7. Adult ♂ P. Sumas, British Columbia, Canada. G. F. Dippie.
8. Adult ♀ P. Carpenters Mt., British Columbia, Canada. C. K. Worthern.
9. Juv. ♂ P. Carpenters Mt., British Columbia, Canada. C. K. Worthern.
10. Adult ♂ P. Simcoe Co., Ontario, Canada. G. F. Dippie.
11. Adult ♂ P. Gooderham, Ontario, Canada. G. F. Dippie.

a. Putorius cicognani richardsoni (Bonaparte).

Mustela richardsonii Bonap., Charlesw. Mag. Nat. Hist., II, 1838, p. 38.

Putorius cicognani richardsoni Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 344. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 426. Zoöl. Ser.

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RICHARDSON'S WEASEL.

1. Adult ♂ P. Forks of Blindman and Red Deer Rivers, Alberta, Canada. G. F. Dippie.
2. Adult ♂ P. Red Deer, Alberta, Canada. G. F. Dippie.
3. Adult ♀ P. Red Deer, Alberta, Canada. G. F. Dippie.
4. Adult — P. Revelstoke, Alberta, Canada. G. F. Dippie.
5. Adult ♂ P. Cariboo, British Columbia, Canada. C. K. Worthern.
6. Adult ♂ Coll. Minot, N. Dakota. W. E. Snyder.

781. Putorius streatori Merriam.

Putorius streatori Merr., N. Am. Faun., No. 11, 1896, p. 13. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 345. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 427. Zoöl. Ser.

STREATOR'S WEASEL.

1–2. Adult ♂ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.
3. Adult ♂ Coll. Boulder Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.
4. Adult ♂ Coll. Johnson's Ranch, Elwah River, Clallam County, Washington. D. G. Elliot.
5. Adult ♂ Coll. Gardiner, Oregon. E. Heller.
6. Adult ♂ Coll. Beaverton, Oregon. E. Heller.
7. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
8. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.

a. Putorius streatori leptus Merriam.

Putorius streatori leptus Merr., Proc. Biol. Soc. Wash., XVI, 1903, p. 76. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 427. Zoöl. Ser.

FEEBLE WEASEL.

1. Adult ♀ P. Boulder County, Colorado. R. T. Young.

782. Putorius rixosus Bangs.

Putorius rixosus Bangs, Proc. Biol. Soc. Wash., X, 1896, p. 21. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 345. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 428. Zoöl. Ser.

PUGNACIOUS WEASEL.

1. Adult ♂ P. Forks of Blindman & Red Deer Rivers, Alberta, Canada. G. F. Dippie.

783. Putorius arcticus Merriam.

Putorius arcticus Merr., N. Am. Faun., No. 11, 1896, p. 15. Elliot,

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Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 345. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 428. Zoöl. Ser.

ARCTIC WEASEL.

1. Adult ♂ P. Howkan, Alaska. G. G. Cantwell.

a. Putorius arcticus kadiacensis Merriam.

Putorius arcticus kadiacensis Merr., N. Am. Faun., No. 11, 1896, p. 16. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 346. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 428. Zoöl. Ser.

KADIAK ISLAND WEASEL.

1. Adult — Topotype. Pres. Kadiak Island, Alaska. G. F. Sargent.

784. Putorius noveboracensis Emmons.

Putorius noveboracensis Emmons, Rep. Quad. Mass., 1840, p. 45. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 346. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies. F. C. M. Pub., VI, 1905, p. 429. Zoöl. Ser.

NORTHERN WEASEL.

1. Adult ♂ Pres. Bloomingdale Spring, Illinois. B. T. Gault.
2. Adult ♀ Pres. Milton Spring, Du Page Co., Illinois. B. T. Gault.
3. Adult ♂ P. White Sulphur Springs, West Virginia. T. Surber.
4. Adult ♂ Exch. Trousers Lake, New Brunswick, Canada. Am. Mus. Nat. Hist. N. Y. J. Rowley.
5. Adult — Pres. Erie, Pennsylvania. G. B. Sennett.

6–7. Adult ♂ P. Branchtown, Ontario, Canada. G. F. Dippie.

8. Adult ♀ P. Waterloo County, Ontario, Canada. G. F. Dippie.
9. Adult ♂ P. Orillia, Lake Simcoe, Ontario, Canada. G. F. Dippie.
10. Adult — P. New York. Ward's Nat. Scien. Establ., Rochter, N. Y.

a. Putorius noveboracensis notius Bangs.

Putorius noveboracensis notius Bangs, Proc. N. Eng. Zoöl. Club, I, 1899, p. 53. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 346. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 429. Zoöl. Ser.

SOUTHERN WEASEL.

1. Adult ♂ P. White Sulphur Springs, West Virginia. T. Surber.

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785. Putorius washingtoni Merriam.

Putorius washingtoni Merr., N. Am. Faun., No. 11, 1896, p. 18. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 347. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 429. Zoöl. Ser.

WASHINGTON WEASEL.

1. Adult ♀ Coll. Happy Lake, Olympic Mts., Clallam County, Washington. D. G. Elliot.

786. Putorius peninsulæ Rhoads.

Putorius peninsulæ Rhoads, Proc. Acad. Nat. Scien. Phil., 1894, p. 152. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 347. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 429. Zoöl. Ser.

FLORIDA WEASEL.

1. Adult — Coll. Enterprise, Florida. T. Surber.

787. Putorius longicaudus (Bonaparte).

Mustela (*Putorius*) *erminea* Rich., Faun. Bor. Amer., Mamm., I, 1829, p. 46. (Part.)

Mustela longicauda Bonap., Charlesw. Mag. Nat. Hist., II, 1838, p. 38.

Putorius longicaudus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 348. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 430. Zoöl. Ser.

LONG-TAILED WEASEL.

1. Adult ♂ P. Eagle Creek, Montana. E. Seton Thompson.
2. Adult ♂ P. Boulder, Colorado. R. T. Young.
3. Adult ♀ P. Red Deer, Alberta, Canada. G. F. Dippie.
4. Adult ♀ P. Orillia, Lake Simcoe, Canada. G. F. Dippie.
5. Adult ♂ P. Branchtown, Ontario, Canada. G. F. Dippie.
6. Adult ♂ P. Gooderham, Ontario, Canada. G. F. Dippie.
7. Adult ♂ P. Canadian Nat. Park, Alberta, Canada. G. F. Dippie.

8–11. Adult ♂ P. Calgary, Alberta, Canada. G. F. Dippie.

12–13. Adult ♀ P. Calgary, Alberta, Canada. G. F. Dippie.

14. Adult ♂ P. Carmen, Manitoba, Canada. G. F. Dippie.

a. Putorius longicaudus spadix Bangs.

Putorius longicauda spadix Bangs, Proc. Biol. Soc. Wash., X, 1896, p. 8.

Putorius spadix Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 348. Zoöl. Ser.

Putorius longicaudus spadix Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 430. Zoöl. Ser.

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CHESTNUT-BROWN WEASEL.

1. Adult ♂ Topotype. Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.

788. Putorius arizonensis Mearns.

Putorius arizonensis Mearns, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 234. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 349. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 431. Zoöl. Ser.

ARIZONA WEASEL.

1. Adult ♂ P. Mt. Siegel, Nevada. W. W. Price.
2. Adult ♂ P. Silver Lake, Boulder County, Colorado. R. T. Young.

789. Putorius xanthogenys (Gray).

Mustela xanthogenys Gray, Ann. Mag. Nat. Hist., 1st Ser., XI, 1843, p. 118.

Putorius xanthogenys Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 349. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 431. Zoöl. Ser.

YELLOW-CHEEKED WEASEL.

1. Adult ♂ P. Palo Alto, California. E. Heller.
2. Adult ♂ Pres. Palo Alto, California. A. G. Maddren.
3. Adult ♂ Coll. Lone Pine, Inyo County, California. E. Heller.
4. Adult ♀ Coll. Lone Pine, Inyo County, California. E. Heller.

a. Putorius xanthogenys mundus Bangs.

Putorius xanthogenys mundus Bangs, Proc. N. Eng. Zoöl. Club, I, 1899, p. 56. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 350. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 431. Zoöl. Ser.

DECORATED WEASEL.

1. Adult ♂ Coll. Nicasio, California. E. Heller.
2. Adult ♀ Topotype. Coll. Point Reyes, California. E. Heller.

b. Putorius xanthogenys oregonensis Merriam.

Putorius xanthogenys oregonensis Merr., N. Am. Faun., No. 11, 1896, p. 25. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 350. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 431. Zoöl. Ser.

OREGON WEASEL.

1–2. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
3. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.

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790. Putorius frenatus (Lichtenstein).

Mustela frenata Licht., Darst. neuer oder wenig bekannt. Säugeth., 1832, pl. XLII.

Putorius frenatus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 350. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 532, figs. 101, LXXV. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 432. Zoöl. Ser.

FIG. LVIII. PUTORIUS FRENATUS. BRIDLED WEASEL.

BRIDLED WEASEL.

1. Adult ♀ Exch. Brownsville, Texas. Am. Mus. Nat. Hist. N. Y. E. C. Greenwood.
2. Adult ♀ Coll. Esperanza, State of Puebla, Mexico. Heller & Barber.

791. Putorius macrophonius Elliot.

Putorius macrophonius Elliot, Proc. Biol. Soc. Wash., XVIII, 1905, p. 235.

GIANT WEASEL.

1. Adult ♂ Type. Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
2. Juv. ♀ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber.

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Subfamily III. **Lutrinæ.**

Genus 223. **Lutra. Otters.**

Lutra Briss., Regn. Anim., 2d ed., 1762, p. 201. Type *Mustela lutra* Linnæus.

Lataxina Gray, List Spec. Mamm. Brit. Mus., 1843, pp. XXI, 70.

Lataxia Gerv., Hist. Nat. Mamm., II, 1855, p. 118.

792. Lutra vulgaris Erxleben.

Lutra vulgaris Erxl., Syst. Regn. Anim., 1777, p. 448.

Lutra nair F. Cuv., Dict. Scien. Nat., XXVII, 1823, p. 247.

Lutra roensis Ogilby, Proc. Zoöl. Soc., 1834, p. 111.

Lutronectes whiteleyi Gray, Proc. Zoöl. Soc., 1867, p. 180, fig.

COMMON OTTER.

1. Adult — P. Japan. Ward's Nat. Scien. Establ., Rochester, N. Y.

793. Lutra canadensis (Schreber).

Mustela lutra canadensis Schreb., Säugth., text, 1778, pl. CXXVI B, 1776.

Mustela (*Lutra*) *canadensis* Kerr, Anim. Kingd., 1792, No. 337.

Lutra lataxina F. Cuv., Dict. Scien. Nat., 1823, XXVII, p. 213.

Lutra hudsonica F. Cuv., Suppl. Buffon, I, 1831, p. 194.

Lataxina mollis Gray, List Spec. Mamm. Brit. Mus., 1843, p. 70.

Lutra canadensis Aud. & Bachm., Quad. N. Am., III, 1853, p. 97, pl. CXXII (Fig. type of *Lataxina mollis* Gray). Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 352. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 433. Zoöl. Ser.

CANADA OTTER.

1. Adult — P. "South Carolina." Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult — P. Eagle Lake, Wisconsin. C. E. Akeley.

a. Lutra canadensis pacifica (Rhoads).

Lutra hudsonica pacifica Rhoads, Trans. Am. Phil. Soc., N. S., XIX, 1898, p. 429.

Lutra canadensis pacifica Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 353. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 434. Zoöl. Ser.

PACIFIC OTTER.

1–3. Adult — P. Kenai Peninsula, Alaska. C. F. Periolat.

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Genus 224. **Latax. Sea Otters.**

Latax Glog., Nov. Acta Phys. Med. Acad. Cæs. Leop.-Carol., XIII, Pt. II, 1827, p. 511. Type *Lutra marina* Erxleben = *Mustela lutris* Linnæus.

Pusa Oken, Lehrb. der Naturg., Thiel. III, 2te Abth., 1816, p. 986. (nec Scopoli.)

Enhydra Flem., Phil. Zoöl., II, 1822, p. 187. (nec *Enhydris* Merrem, Rept.)

FIG. LIX. LATAX LUTRIS. NORTHERN SEA OTTER.

794. * Latax lutris (Linnæus).

Mustela lutris Linn., Syst. Nat., I, 1758, p. 45; I, 1766, p. 66.

Lutra marina Erxl., Syst. Reg. Anim., 1777, p. 445.

Pusa orientalis Oken, Lehrb. der Naturg., Thiel III, 2te Abth., 1816, p. 986.

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* *Latax lutris* Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 537, Zoöl. Ser., (nec pl. LII,) may more properly refer to the *Latax lutris nereis* Merr. rather than to the present species.

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Lutra stelleri Less., Man. Mamm., 1827, p. 156.
Enydris (sic) *gracilis* Fisch., Syn. Mamm., 1829, p. 229.
Latax lutris Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 354, pl. XXXVIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 436. Zoöl. Ser.

NORTHERN SEA OTTER.

1–2. Juv. — P. Alaska. Ward's Nat. Scien. Establ., Rochester, N. Y.

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Order VIII. **Pinnipedia. Sea-lions, Seals, etc.**

Family I. **Otariidæ. Sea-lions.**

Genus 225. **Eumetopias.**

Eumetopias Gill, Proc. Essex Institute, v, 1866, pp. 7, 11. Type *Otaria stelleri* Lesson = *Phoca jubata* Schreber.

795. Eumetopias jubata (Schreber).

Phoca jubata Schreb., Säugth., III, 1778, p. 300, pl. LXXXIII B.
Otaria jubata Péron and Lesueur, Voy. Terr. Austr., III, 1816, p. 40.
Otaria stelleri Less., Dict. Class. Hist. Nat., XIII, 1828, p. 420.
Phoca leonina Pall., Zoog. Rosso-Asiat., I, 1831, p. 104.
Arctocephalus monteriensis Gray, Proc. Zoöl. Soc., 1859, p. 358, pl. LXXII.
Eumetopias stelleri Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 355, pl. XXXIX. Zoöl. Ser.
Eumetopias jubata Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 437. Zoöl. Ser.

STELLER'S SEA-LION.

1. Adult — P. California. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 226. **Callotaria. Fur Seal.**

Callotaria Palmer, Proc. Biol. Soc. Wash., VII, 1892, p. 156. Type *Phoca ursina* Linnæus.

Callorhinus Gray, Proc. Zoöl. Soc., 1859, p. 359. (nec Blanchard, 1850, Entomol.; nec Girard, 1857, Herpetology.)
Arctocephalus Gill, Proc. Essex Inst., V, 1866, pp. 7, 11. (nec F. Cuvier.)
Otoes Palmer, Proc. Biol. Soc. Wash., XIV, 1901, p. 133. (nec Fischer, 1817.)

796. Callotaria alascana (Jordan & Clark).

Callorhinus alascanus Jord. & Clark, The Fur Seals and Fur Seal Islands, Pt. 3, 1899, p. 2.
Callotaria ursina Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 357, pl. XL. Zoöl. Ser. (nec Linnæus.)

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FIG. LX. GROUP OF FUR SEALS OR SEA-BEARS.

Callotaria alascana Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 438. Zoöl. Ser.

PRIBILOF ISLANDS FUR SEAL.

1. Adult ♂ P. Pribilof Islands. C. H. Gilbert.
2. Adult ♀ P. Pribilof Islands. C. H. Gilbert.
3–4. Juv. — P. Pribilof Islands. C. H. Gilbert.
5. Adult ♂ P. St. Paul Island, Alaska. Ward's Nat. Scien. Establ., Rochester, N. Y.
6. Adult ♀ P. St. Paul Island, Alaska. Ward's Nat. Scien. Establ., Rochester, N. Y.

Family II. **Odontobænidæ.**

Genus 227. **Odontobænus. Walrus.**

Odobenus (sic) Briss., Reg. Anim., 2d ed., 1762, pp. 12, 30. Type *Phoca rosmarus* Linnæus.

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797. Odontobænus rosmarus (Linnæus).

Phoca rosmarus Linn., Syst. Nat., I, 1758, p. 38.

Trichechus rosmarus Linn., Syst. Nat., I, 1766, p. 49. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 358. pl. XLI. Zoöl. Ser.

Odontobænus rosmarus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 439. Zoöl. Ser.

ATLANTIC WALRUS.

1–2. Adult — Exch. West Coast of Greenland. Am. Mus. Nat. Hist. N. Y. L. S. Dyche.

3–6. Juv. — Exch. West Coast of Greenland. Am. Mus. Nat. Hist. N. Y. L. S. Dyche.

798. Odontobænus obesus (Illiger).

Trichechus rosmarus Shaw, Gen. Zoöl., I, 1800, p. 234, fig. 68. (Part.)

Trichechus obesus Illig., Abhandl. d. Akad. Berl., 1815, pp. 64, 70, 75. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 358. Zoöl. Ser.

Trichechus divergens Illig., Abhandl. d. Akad. Berl., 1815, p. 68.

Rosmarus cookii Fremery, Bydrag. tot de natuurk. Wetensch., VI, 1831, p. 385.

Rosmarus arcticus Pall., Zoog. Rosso-Asiat., 1831, p. 269, pls. XXVIII, XXIX.

Odontobænus obesus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 439. Zoöl. Ser.

PACIFIC WALRUS.

1. Adult ♂ P. Pacific Ocean. Ward's Nat. Scien. Estab., Rochester, N. Y.

Family III. **Phocidæ. Sea Elephants, Seals.**

Subfamily I. **Cystophorinæ.**

Genus 228. **Mirounga. Sea Elephants.**

Mirounga Gray, in Griff., Cuvier's Anim. Kingd., V, 1827, p. 179. (Part.) Type *Phoca proboscidea* Péron = *Phoca leonina* Linnæus.

Macrorhinus F. Cuv., Dict. Scien. Nat., XXXIX, 1826, p. 552. (nec Latreille, 1825, Coleopt.)

Rhinophoca Wagl., Nat. Syst. Amph., 1830, p. 27.

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Morunga Gray, List Spec. Mamm. Brit. Mus., 1843, pp. XXIII, 103. *Id.* Zoöl. Voy. 'Erebus and Terror,' Mamm., 1844, p. 4.

799. Mirounga leonina (Linnæus).

Phoca leonina Linn., Syst. Nat., 1758, p. 37. Schreb., Säugth., III, 1776, p. 297, pl. LXXXIII A.

Phoca elephantina Molina, Sag. Stor. Nat. Chili, 1782, p. 280.

Phoca proboscidea Péron & Lesueur, Voy. aux Terres Austr., II, 1816, p. 34. Desm., Nouv. Dict. Hist. Nat., XXV, 1817, p. 550, pl. G44, fig. 2. *Id.* Mamm., I, 1820, p. 238.

Phoca resima Péron & Lesueur, Voy. aux Terres Austr., II, 1816, p. 65.

Phoca còxii Desm., Nouv. Dict. Hist. Nat., XXV, 1817, p. 559.

Phoca ansonii Blainv., Journ. de Phys., XCI, 1820, pp. 299, 300. Desm., Mamm., I, 1820, p. 239.

Mirounga proboscidea Gray, Griffith's Anim. Kingd., V, 1827, p. 180.

Mirounga patagonica Gray, Griff. Anim. Kingd., V, 1827, p. 180.

Phoca dubia Fisch., Syn. Mamm., 1829, p. 235.

Cystophora proboscidea Nilss., Arch. f. Naturg., I, 1841, p. 323.

Morunga elephantina Gray, Zoöl. Voy. 'Erebus & Terror,' Mamm., 1844, pp. 4, 8, pls. IX, X.

Morunga proboscidea Sclat., Proc. Zoöl. Soc., 1868, p. 227.

Cystophora falklandica Peters, Monatsb. Akad. Berl., 1875, p. 394.

Cystophora kerguelensis Peters, Monatsb. Akad. Berl., 1875, p. 394.

Macrorhinus leoninus Allen, N. Am. Pinnipeds, 1880, p. 466.

SOUTHERN ELEPHANT SEAL.

1. Juv. ♀ P. Kerguelen Island. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♂ P. Macquarie Islands, Antarctic Region. Tring Museum, England.

800. Mirounga angustirostris (Gill).

Macrorhinus angustirostris Gill, Proc. Chicago Acad. Scien., 1866, p. 33. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 359, pls. XLII, XLIII, XLIV. Zoöl. Ser.

Mirounga angustirostris Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 545, fig. LXXX, pls. LXIII, LXIV, LXV, LXVI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 440. Zoöl. Ser.

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ELEPHANT SEAL.

1. Juv. ♀ P. Lower California. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 229. **Phoca. Hair Seals.**

Phoca Linn., Syst. Nat., I, 1758, p. 37. Type *Phoca vitulina* Linnæus.
Pusa Scopoli, Intr. Hist. Nat., 1777, p. 490.
Calocephalus F. Cuv., Dict. Scien. Nat., XXXIX, 1826, p. 544.
Pagophilus Gray, Zoöl. Voy. 'Erebus & Terror,' Mamm., 1844, p. 3.
Pagomys Gray, Proc. Zoöl. Soc., 1864, p. 31.
Erignathus Gill, Proc. Essex Inst., V, 1866, pp. 5, 9.
Haliphilus Gray, Ann. Mag. Nat. Hist., 4th Ser., XVII, 1866, p. 446.
Histriophoca Gill, Amer. Nat., VII, 1873, p. 179.

Subgenus A. **Phoca.**

801. Phoca vitulina Linnæus.
Phoca vitulina Linn., Syst. Nat., I, 1758, p. 38; I, 1766, p. 56. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 363, pl. XLIX. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 442. Zoöl. Ser.
Phoca variegata Nilss., Skand. Faun., I, 1820, p. 359.
Phoca scopulicola Thienem., Reis. Nord. Eur., I, 1824, p. 59, pl. V. (ad. male.)
Phoca littorea Thienem., Reis. Nord. Eur., I, 1824, p. 61, pl. VI, (male); pls. VII, VIII, (skulls).
Phoca pealei Gill, Proc. Essex Inst., V, 1866, pp. 4, 13.
Phoca fœtida Bartl., Proc. Zoöl. Soc., 1868, p. 402. (nec Fabricius.)

HARBOR SEAL.

1. Adult — P. Gulf of Mexico. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult — P. Coast of Maine. Ward's Nat. Scien. Establ., Rochester, N. Y.
3. Juv. — P. Coast of Newfoundland. Ward's Nat. Scien. Establ., Rochester, N. Y.

802. Phoca richardi (Gray).
Halicyon richardii Gray, Proc. Zoöl. Soc., 1864, p. 28, fig. 1.

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Phoca largha Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 363. Zoöl. Ser. (nec Pallas.)

Phoca richardii Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1902, p. 491. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 442. Zoöl. Ser.

FIG. LXI. PHOCA RICHARDI. RICHARD'S HARBOR SEAL.

RICHARD'S HARBOR SEAL.

1. Adult — Coll. Yakutat Bay, Alaska. D. G. Elliot.

Subgenus B. **Pusa.**

803. Phoca hispida Schreber.

Phoca hispida Schreb., Säugth., III, 1776, p. 312, pl. LXXXVI. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 364. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 443. Zoöl. Ser.

Phoca fœtida Fabr., Müller's Zool. Dan. Prod., 1776, p. VIII.

Phoca annellata Nilss., Skand. Faun., I, 1820, p. 362.

Calocephalus discolor F. Cuv., Dict. Scien. Nat., XXXIX, 1826, p. 554.

Phoca schreberi Less., Dict. Class. Hist. Nat., XIII, 1828, p. 414.

Phoca frederici Less., Dict. Class. Hist. Nat., XIII, 1828, p. 416.

Callocephalus dimidiatus Gray, Cat. Seals & Whales Brit. Mus., 1866, p. 22.

RINGED SEAL.

1. Adult — Exch. Coast of Nova Scotia. Am. Mus. Nat. Hist. N. Y. L. S. Dyche.

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Subgenus C. **Pagophilus.**

804. Phoca groenlandica Fabricius.

Phoca groenlandica Fabr., Müller's Zool. Dan. Prod., 1776, p. VIII. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 364, pl. XLIX. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 444. Zoöl. Ser.

Phoca oceanica Lepech., Act. Acad. Scien. Imp. Petrop., I, 1777, p. 295, pls. VII, VIII.

Phoca semilunaris Bodd., Elench. Anim., 1785, p. 170.

Phoca albicauda Desm., Mamm., Suppl., 1822, p. 839.

Phoca lagura G. Cuv., Oss. Fòss., V, 1825, p. 206. (juv.)

Phoca mulleri Less., Dict. Class. Hist. Nat., XIII, 1828, p. 413.

Phoca desmaresti Less., Dict. Class. Hist. Nat., XIII, 1828, p. 416.

Phoca pilayi Less., Dict. Class. Hist. Nat., XIII, 1828, p. 416.

Phoca dorsata Pallas, Zoog. Rosso-Asiat., I, 1831, p. 112.

Phoca albini Alex., Mem. Acad. Torino, II, 1850, p. 141, pls. 1–4. (Skeleton.)

Phoca annellata Gaim., Voy. en Islande, Atlas, 1851, pl. XI, fig. 9. (nec Nilsson.)

HARP SEAL.

1. Adult — Exch. Coast of Labrador. Am. Mus. Nat. Hist. N. Y. L. S. Dyche.
2. Juv. — P. Coast of Newfoundland. Ward's Nat. Scien. Establ., Rochester, N. Y.
3. Adult — P. Kane Basin, Greenland. S. Warmbath.

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Order IX. **Insectivora. The Insectivores.**

Family I. **Cynocephalidæ. Flying Lemurs.**

Genus 230. **Cynocephalus.**

Cynocephalus Bodd., Dierk. Mengelwerk, II, 1768, p. 8, footnote "1." Type *Lemur volans* Linnæus.

Galeopithecus Pall., Act. Acad. Scien. Imp. Petrop., IV, Pt. I, 1780, p. 208, tab. 7, 8.

805. Cynocephalus volans (Linnæus).

Lemur volans Linn., Syst. Nat., I, 1758, p. 30.

Galeopithecus volans Pall., Act. Acad. Scien. Imp. Petrop., IV, Pt. I, 1780, p. 208, tab. 8.

FLYING LEMUR.

1. Adult — P. Sumatra. Ward's Nat. Scien. Establ., Rochester, N. Y.

806. Cynocephalus philippinensis (Waterhouse).

Galeopithecus philippinensis Waterh., Proc. Zoöl. Soc., 1838, p. 119. Günth., Proc. Zoöl. Soc., 1879, p. 74.

PHILIPPINE ISLANDS FLYING LEMUR.

1. Adult — P. Philippine Islands. Menage Scient. Exped. Bourns & Worcester.

Family II. **Tupaiidæ. Tree Shrews.**

Genus 231. **Tupaia.**

Tupaia Raffles, Trans. Linn. Soc. Lond., XIII, 1822, p. 256. Type *Tupaia ferruginea* Raffles.

Glisorex Desm., Mamm., Suppl., II, 1822, p. 535.

Cladobates F. Cuv., Dents Mamm., 1825, p. 251.

Hylogale Temm., Mon. Mamm., I, 1827, p. XIX.

807. Tupaia tana Raffles.

Tupaia tana Raffles, Trans. Linn. Soc., XIII, 1822, p. 257. (nec Is. Geoff.)

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TREE SHREW.

1. Adult — P. Sumatra. Ward's Nat. Scien. Establ., Rochester, N. Y.

Family III. **Macroscelididæ.**

Genus 232. **Macroscelides.**

Macroscelides A. Smith, Zoöl. Jour., IV, 1829, p. 435. Type *Macroscelides typus* Smith = *Sorex proboscideus* Shaw.

Eumerus Is. Geoff., Ann. Scien. Nat., Paris, XVIII, 1829, p. 470.

808. Macroscelides proboscideus (Shaw).

Sorex proboscideus Shaw, Gen. Zoöl., Mamm., I, Pt. II, 1800, p. 536.

Macroscelides typus A. Smith, Zoöl. Jour., IV, 1829, p. 435.

ELEPHANT SHREW.

1. Adult ♂ P. Zanzibar, S. E. Africa. Deyrolle Fils.

809. Macroscelides revoili Huet.

Macroscelides revoili Huet, Bull. Soc. Philom., 1881, p. 96.

REVOIL'S SHREW.

1. Adult ♂ Coll. Haili, Somaliland, East Africa. D. G. Elliot.

Genus 233. **Rhynchocyon.**

Rhynchocyon Peters, Bericht u. Verh. K. Preuss. Akad. Wiss. Berl., 1847, p. 36. Type *Rhynchocyon cirnei* Peters.

810. Rhynchocyon petersi du Bocage.

Rhynchocyon petersi du Bocage, Jour. Scien. Lisb., VII, 1880, p. 159. Thos., Proc. Zoöl. Soc., 1890, p. 444.

PETERS'S SHREW.

1. Adult ♂ P. S. E. Africa. Deyrolle Fils.

Family IV. **Erinaceidæ.**

Subfamily I. **Erinaceinæ. Hedgehogs.**

Genus 234. **Erinaceus.**

Erinaceus Linn., Syst. Nat., I, 1758, p. 52; I, 1766, p. 75. Type *Erinaceus europæus* Linnæus.

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Atelerix Pomel, Archiv. Scien. Phys. Nat., Bibl. Univ. Genève, IX, 1848, p. 251.

Hemiechinus Fitzin., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien, LIV, Abth. 1, 1866, p. 565.

Peroëchinus Fitzin., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien, LIV, Abth. 1, 1866, p. 565.

811. Erinaceus europæus Linnæus.

Erinaceus europæus Linn., Syst. Nat., I, 1758, p. 52. *Id.* Dobs., Monog. Insect., I, 1882, p. 8, pl. I.

Erinaceus concolor Martin, Proc. Zoöl. Soc., 1837, p. 103.

Erinaceus dealbatus Swinh., Proc. Zoöl. Soc., 1870, p. 450.

EUROPEAN HEDGEHOG.

1. Adult — P. England. Ward's Nat. Scien. Establ., Rochester, N. Y.

2. Adult ♂ P. Upsala, Sweden. J. A. Loring.

812. Erinaceus sclateri ? Anderson.

Erinaceus sclateri Ander., Proc. Zoöl. Soc., 1895, p. 414, fig. 1.

Erinaceus diadematus Elliot, Pub. Field Columb. Mus., I, 1897, p. 153. Zoöl. Ser. (nec Fitzing.)

DIADEM HEDGEHOG.

1–2. Adult ♂ Coll. Berbera, Somaliland, East Africa. D. G. Elliot.

813. Erinaceus albiventris Wagner.

Erinaceus albiventris Wagn., Schreb. Säugth., Suppl., II, 1841, p. 22. Dobson, Mon. Insect., Pt. II, 1882, p. 11. Elliot, Pub. Field Columb. Mus., I, 1897, p. 153. Zoöl. Ser.

WHITE-BELLIED HEDGEHOG.

1. Adult ♂ Coll. Toyo Plain, Somaliland, East Africa. D. G. Elliot.

Family V. **Soricidæ. Shrews.**

Subfamily I. **Soricinæ.**

Genus 235. **Sorex. Common Shrews.**

Sorex Linn., Syst. Nat., I, 1758, p. 53; I, 1766, p. 73. Type *Sorex araneus* Linnæus.

814. Sorex personatus I. Geoffroy.

Sorex personatus I. Geoff., Mém. Mus. Hist. Nat. Paris, XV, 1827,

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p. 122. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 366. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 446. Zoöl. Ser.

Sorex forsteri Rich., Zoöl. Jour., III, 1828, p. 516.

Sorex cooperi Bachm., Jour. Acad. Nat. Scien. Phil., 1837, p. 388, pl. XXIV, fig. 7.

Sorex fimbripes Bachm., Jour. Acad. Nat. Scien. Phil., 1837, p. 391, pl. XXIV, fig. 8.

Amphisorex lesueuri Duvern., Mag. Zool., Mamm., IV, 1842, p. 33, pl. L.

Sorex platyrhynchus Linsley, Sillim. Am. Jour. Scien., XLIII, 1842, p. 346.

Otisorex platyrhinus De Kay, Nat. Hist. N. Y., Zoöl., I, 1842, p. 22, pl. V, fig. 1.

Sorex haydeni Baird, N. Am. Mamm., 1857, p. 29.

Sorex richardsoni Dobs., Mon. Insect., I, Pt. III, 1890, pl. XXIII, fig. 9. (nec Bachman.)

Sorex idahoensis Merr., N. Am. Faun., No. 5, 1891, p. 32.

MASKED SHREW.

1–3. Adult ♂ Exch. Gulquae Lake, New Brunswick. Am. Mus. Nat. Hist. N. Y. J. Rowley.

4–5. Adult ♀ Exch. Gulquae Lake, New Brunswick. Am. Mus. Nat. Hist. N. Y. J. Rowley.

6–7. Adult ♂ Exch. South Twin Lake, Penobscot County, Maine. Am. Mus. Nat. Hist. N. Y. J. Rowley.

8–9. Adult ♀ Exch. South Twin Lake, Penobscot County, Maine. Am. Mus. Nat. Hist. N. Y. J. Rowley.

10–18. Adult — P. Red Deer, Alberta, Canada. G. F. Dippie.

19–24. Adult ♂ Coll. Lake Edward, Quebec, Canada. T. Surber.

25–26. Adult ♂ Coll. Black Mountain, West Virginia. T. Surber.

27. Adult ♂ Coll. Dalhousie, New Brunswick. T. Surber.

28. Adult ♂ Coll. Lake Escarte, Quebec, Canada. T. Surber.

29. Adult ♀ Coll. Minot, North Dakota. W. E. Snyder.

30. Adult ♀ Coll. Bottineau, North Dakota. W. E. Snyder.

31. Adult ♂ P. Gorget, Prince Edward Island, Canada. R. T. Young.

32. Adult ♀ P. Gorget, Prince Edward Island, Canada. R. T. Young.

815. Sorex fumeus Miller.

Sorex platyrhinus Dobs., Mon. Insect, I, Pt. III, 1890, pl. XXIII, fig. 5. (nec De Kay.)

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Sorex fumeus Miller, N. Am. Faun., No. 10, 1895, p. 50. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 369. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 447. Zoöl. Ser.

SMOKY SHREW.

1. Adult ♂ Coll. Rivière du Loup, Quebec, Canada. T. Surber.
2. Adult ♀ Coll. Restigouche River, New Brunswick, Canada. T. Surber.
3–6. Adult ♀ Coll. Black Mountain, West Virginia. T. Surber.
7. Adult ♂ Coll. White Sulphur Springs, West Virginia. T. Surber.

816. Sorex setosus Elliot.

Sorex setosus Elliot, Pub. Field Columb. Mus., I, 1899, p. 274. Zoöl. Ser. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 369. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 448. Zoöl. Ser.

SPINY SHREW.

1–2. Adult ♂ Type and paratype. Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.

817. Sorex vagrans Baird.

Sorex vagrans Baird, N. Am. Mamm., 1857, p. 15, pl. XXVI, fig. 1675. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 370. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 448. Zoöl. Ser.

Sorex suckleyi Baird, N. Am. Mamm., 1857, p. 18, pl. XXVII, fig. 1677.

WANDERING SHREW.

1–2. Adult ♂ Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.
3–6. Adult — Coll. Happy Lake, Clallam County, Washington. D. G. Elliot.
7–9. Adult ♂ Coll. Johnson's Ranch, Clallam County, Washington. D. G. Elliot.
10–12. Adult ♀ Coll. Johnson's Ranch, Clallam County, Washington. D. G. Elliot.
13–15. Adult ♀ Coll. Grant's Pass, Oregon. E. Heller.
16–20. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
21. Adult ♂ Coll. Mendocino, California. E. Heller.
22–24. Adult ♂ Coll. Eureka, California. E. Heller.
25–27. Adult ♀ Coll. Eureka, California. E. Heller.
28. Adult ♀ Coll. Requa, California. E. Heller.
29. Adult ♀ Coll. Crescent City, California. E. Heller.

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30–31. Adult ♂ Coll. Riverton, Oregon. E. Heller.
32–37. Adult ♂ Coll. McCoy, Oregon. E. Heller.
38. Adult ♀ Coll. McCoy, Oregon. E. Heller.
39. Adult ♀ P. Sumas, British Columbia, Canada. C. K. Worthern.

818. Sorex obscurus Merriam.

Sorex vagrans similis Merr., N. Am. Faun., No. 5, 1891, p. 34, pl. IV, fig. 3. (nec Hensel.)

Sorex obscurus Merr., N. Am. Faun., No. 10, 1895, p. 72, pl. VIII, figs. 1, 1a. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 371. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 449. Zoöl. Ser.

DUSKY SHREW.

1. Juv. ♂ P. Pyramid Peak, Eldorado County, California. W. W. Price.
2. Adult ♀ P. Pyramid Peak, Eldorado County, California. W. W. Price.
3. Adult ♀ P. Silver Lake, Amador County, California. W. W. Price.
4. Juv. ♀ P. Silver Lake, Amador County, California. W. W. Price.
5. Adult ♂ P. Cariboo, British Columbia, Canada. C. K. Worthern.
6–7. Adult ♀ P. Cariboo, British Columbia, Canada. C. K. Worthern.
8. Adult ♂ P. Sumas, British Columbia, Canada. C. K. Worthern.
9. Adult ♀ P. Sumas, British Columbia, Canada. A. C. Brooks.
10–15. Adult ♀ P. Boulder, Colorado. R. T. Young.
16–28. Adult ♂ P. Boulder, Colorado. R. T. Young.
29–33. Adult ♂ P. Nederland, Colorado. R. T. Young.
34. Adult ♀ P. Nederland, Colorado. R. T. Young.
35. Adult ♀ P. Eldora, Colorado. R. T. Young.

a. Sorex obscurus ventralis Merriam.

Sorex obscurus ventralis Merr., N. Am. Faun., No. 10, 1895, p. 75. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 550, fig. LXXXI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 450. Zoöl. Ser.

CHESTNUT-BELLIED SHREW.

1. Adult ♀ Coll. Patzcuaro, State of Michoacan, Mexico. F. E. Lutz.

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FIG. LXII. SOREX O. VENTRALIS. CHESTNUT-BELLIED SHREW.

a. Sorex glacialis shumaginensis (Merriam).

Sorex alascensis shumaginensis Merr., Proc. Wash. Acad. Scien., II, 1900, p. 18.

Sorex glacialis shumaginensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 373. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 451. Zoöl. Ser.

POPOF ISLAND SHREW.

1. Adult ♀ Coll. Popof Island, Shumagin Group, Alaska. D. G. Elliot.

819. Sorex trowbridgii Baird.

Sorex trowbridgii Baird, N. Am. Mamm., 1857, p. 13. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 373. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 452. Zoöl. Ser.

TROWBRIDGE'S SHREW.

1–5. Adult ♂ Coll. Marshfield, Oregon. E. Heller.
6–12. Adult ♀ Coll. Marshfield, Oregon. E. Heller.
13. Adult ♂ Coll. Gardiner, Oregon. E. Heller.
14. Adult ♀ Coll. Gardiner, Oregon. E. Heller.
15–16. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
17–18. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.
19–20. Adult ♂ P. Sumas, British Columbia, Canada. C. K. Worthern.

820. Sorex montereyensis Merriam.

Sorex montereyensis Merr., N. Am. Faun., No. 10, 1895, p. 79.

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Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 373, fig. 70. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 452. Zoöl. Ser.

MONTEREY SHREW.

1–15. Adult ♀ P. Portola, California. W. W. Price.
16–21. Adult ♂ P. Portola, California. W. W. Price.
22. Adult ♀ P. La Honda, California. W. W. Price.
23–24. Adult ♀ P. Mount Hamilton, California. W. W. Price.
25–32. Adult ♂ Coll. Point Reyes, California. E. Heller.
33–34. Adult ♀ Coll. Point Reyes, California. E. Heller.
35. Adult ♂ Coll. Petaluma, California. E. Heller.
36–37. Adult ♀ Coll. Petaluma, California. E. Heller.
38. Adult ♂ Coll. Eureka, California. E. Heller.
39–42. Adult ♀ Coll. Eureka, California. E. Heller.
43–44. Adult ♀ Coll. Mendocino, California. E. Heller.
45–55. Adult ♂ Coll. Nicasio, California. E. Heller.
56–57. Adult ♀ Coll. Nicasio, California. E. Heller.
58–60. Adult ♂ Coll. Mount Whitney, California. E. Heller.
61–62. Adult ♀ Coll. Mount Whitney, California. E. Heller.

821. Sorex californicus Merriam.

Sorex californicus Merr., N. Am. Faun., No. 10, 1895, p. 80, pl. XII, figs. 6, 7. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 374. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 452. Zoöl. Ser.

CALIFORNIA SHREW.

1. Adult ♀ Pres. Palo Alto, California. E. Heller.

822. Sorex ornatus Merriam.

Sorex ornatus Merr., N. Am. Faun., No. 10, 1895, p. 79, pl. VIII, figs. 3, 3a. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 374. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 452. Zoöl. Ser.

ORNAMENTED SHREW.

1. Adult ♂ Coll. Fort Tejon, California. E. Heller.
2–4. Adult ♀ Coll. Piru Creek, California. E. Heller.
5. Adult ♂ Coll. Los Angeles, California. E. Heller.
6–7. Adult ♀ Coll. Los Angeles, California. E. Heller.

823. Sorex pacificus Coues.

Sorex pacificus Coues, Bull. U. S. Geol. & Geog. Surv., III, 1877, p. 650. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 375. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 454. Zoöl. Ser.

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PACIFIC SHREW.

1–2. Adult ♂ Coll. Mendocino, California. E. Heller.
3. Adult ♀ Coll. Mendocino, California. E. Heller.
4. Adult ♂ Coll. Crescent City, California. E. Heller.
5–10. Adult ♂ Coll. Eureka, California. E. Heller.
11–18. Adult ♀ Coll. Eureka, California. E. Heller.
19–30. Adult ♂ Coll. Requa, California. E. Heller.
31–34. Adult ♀ Coll. Requa, California. E. Heller.
35. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
36–40. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.
41. Adult ♂ Coll. Marshfield, Oregon. E. Heller.
42. Adult ♀ Coll. Marshfield, Oregon. E. Heller.
43. Adult ♂ Coll. Gardiner, Oregon. E. Heller.
44. Adult ♀ Coll. Gardiner, Oregon. E. Heller.

824. Sorex orinus Elliot.

Sorex orinus Elliot, Pub. Field Columb. Mus., III, 1903, p. 172. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 553, fig. 102. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 456. Zoöl. Ser.

MOUNTAIN SHREW.

1. Adult ♀ Coll. Type. Aguaje de las Fresas, Lower California, Mexico. E. Heller.
2–3. Adult ♂ Coll. San Quentin, Lower California, Mexico. E. Heller.
4. Adult ♀ Coll. San Quentin, Lower California, Mexico. E. Heller.

Genus 236. **Microsorex. Small Shrews.**

Microsorex Coues, Notes on Amer. Insect. Mamm., Bull. U. S.Geol. & Geog. Surv., III, 1877, No. 3, p. 646. Type *Sorex hoyi* Baird.

825. Microsorex hoyi (Baird).

Sorex hoyi Baird, N. Am. Mamm., 1857, p. 32, pl. XXVIII.
Sorex thompsoni Baird, N. Am. Mamm., 1857, p. 34.
Microsorex hoyi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 377, fig. 71. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 457. Zoöl. Ser.

HOY'S SHREW.

1. Adult ♂ P. Allerton, Prince Edward Island, Canada. R. T. Young.

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2–3. Adult ♂ P. Gorget, Prince Edward Island, Canada. R. T. Young.
4. Adult ♀ P. Gorget, Prince Edward Island, Canada. R. T. Young.

Genus 237. **Neosorex. Swimming Shrews.**

Neosorex Baird, N. Am. Mamm., 1857, p. 11. Type *Neosorex navigator* Baird.

a. Neosorex palustris navigator (Baird).
Neosorex navigator Baird, N. Am. Mamm., 1857, p. 11.
Sorex palustris Merr., N. Am. Faun., No. 5, 1891, p. 35. (nec Richardson.)
Neosorex palustris navigator Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 379. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 458. Zoöl. Ser.

NAVIGATOR SHREW.
1. Adult ♂ P. Boulder, Colorado. R. T. Young.
2–3. Adult ♀ P. Boulder, Colorado. R. T. Young.
4–5. Adult ♂ P. Nederland, Colorado. R. T. Young.
6. Adult ♀ P. Nederland, Colorado. R. T. Young.
7–14. Adult ♀ Coll. Whitney Creek, Mt. Whitney, California. E. Heller.
15–17. Adult ♂ Coll. Whitney Meadows, Mt. Whitney, California. E. Heller.
18–19. Adult ♀ Coll. Whitney Meadows, Mt. Whitney, California. E. Heller.

Genus 238. **Atophyrax. Anomalous Shrews.**

Atophyrax Merr., Trans. Linn. Soc. N. Y., II, 1884, p. 217. Type *Atophyrax bendirii* Merriam.

826. Atophyrax bendirii Merriam.
Atophyrax bendirii Merr., Trans. Linn. Soc. N. Y., II, 1884, p. 217. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 381, fig. 73. Zoöl. Ser. *Id.* Pub. Field Columb. Mus., III, 1903, p. 195. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 459. Zoöl. Ser.
Sorex bendirii palmeri Merr., N. Am. Faun., No. 10, 1895, p. 97.

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Atophyrax bendirii palmeri Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 381. Zoöl. Ser.

BENDIRE'S SHREW.

1. Adult ♂ Coll. Requa, California. E. Heller.
2. Adult ♀ Coll. Requa, California. E. Heller.
3. Adult ♀ Coll. Marshfield, Oregon. E. Heller.
4. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
5. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.
6. Adult — P. Sumas, British Columbia, Canada. C. K. Worthern.

Genus 239. **Blarina. Short-tailed Shrews.**

Blarina Gray, Proc. Zoöl. Soc., 1837, p. 124. Type *Sorex talpoides* Gapper = *Sorex brevicaudus* Say.

Brachysorex Duvern., Mag. Zool., 2me Sér., IV, 1842, p. 37, pl. 52.

Blaria Gray, List Spec. Mamm. Brit. Mus., 1843, p. XXI.

Talposorex Pomel, Archiv. Scien. Phys. & Nat., Bibl. Univ. Genève, IX, 1848, p. 248. (nec Schinz, 1821; nec Lesson, 1827.)

Cryptotis Pomel, Archiv. Scien. Phys. & Nat., Bibl. Univ. Genève, IX, 1848, p. 249.

Galemys Pomel, Archiv. Scien. Phys. & Nat., Bibl. Univ. Genève, IX, 1848, p. 249. (nec Kaup.)

Anotus Wagn., Schreb. Säugth., Suppl., V, 1855, p. 550. (nec Rafinesque, 1815.)

Soriciscus Coues, Bull. U. S. Geol. & Geogr. Surv. Terr., 1877, p. 649.

Subgenus A. **Blarina.**

827. Blarina brevicauda (Say).

Sorex brevicaudus Say, Long's Exped. Rocky Mts., I, 1823, p. 164.

Sorex talpoides Gapper, Zoöl. Jour., V, 1830, p. 202, pl. VIII.

Sorex dekayi Bachm., Jour. Acad. Nat. Scien. Phil., 1837, p. 377.

Galemys (*Brachysorex*) *micrurus* Pomel, Archiv. Scien. Phys. & Nat., Bibl. Univ. Genève, IX, 1848, p. 249.

Sorex angusticeps Baird, N. Am. Mamm., 1857, p. 47.

Blarina costaricensis Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 205. (not from Costa Rica.)

Blarina brevicauda Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II,

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1901, p. 382, fig. 74. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 461. Zoöl. Ser.

Blarina brevicauda talpoides Bangs, Proc. N. Eng. Zoöl. Club, III, 1902, p. 75.

SHORT-TAILED SHREW.

1. Adult ♂ P. Scriba, New York. D. D. Stone.
2–3. Adult ♀ Exch. Hastings, New York. Am. Mus. Nat. Hist. N. Y. J. Rowley.
4–5. Adult ♀ Exch. Fairview, New Jersey. Am. Mus. Nat. Hist. N. Y. Chapman & Granger.
6. Adult ♂ Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
7. Adult ♀ Exch. Fort Snelling, Minnesota. Am. Mus. Nat. Hist. N. Y. E. A. Mearns.
8–9. Adult ♂ Exch. Weaverville, N. Carolina. Am. Mus. Nat. Hist. N. Y. J. S. Cairns.
10. Adult ♂ Exch. Tobique Point, New Brunswick. Am. Mus. Nat. Hist. N. Y. J. Rowley.
11. Adult ♂ Exch. Trousers Lake, New Brunswick. Am. Mus. Nat. Hist. N. Y. J. Rowley.
12–15. Adult ♂ Coll. Black Mountain, West Virginia. T. Surber.
16. Juv. ♀ Coll. Black Mountain, West Virginia. T. Surber.
17. Adult ♂ P. White Sulphur Springs, West Virginia. T. Surber.
18. Adult ♀ P. White Sulphur Springs, West Virginia. T. Surber.
19. Adult ♀ Coll. White Sulphur Springs, West Virginia. T. Surber.
20–23. Adult ♀ Pres. White Sulphur Springs, West Virginia. T. Surber.
24–26. Adult ♀ Pres. Laporte, Indiana. C. M. Barber.
27. Adult ♂ Pres. Jackson Park, Chicago, Illinois. F. E Lutz.
28–31. Adult ♀ Pres. Jackson Park, Chicago, Illinois. F. E. Lutz.
32. Adult — P. Knoxville, Iowa. G. K. Cherrie.
33. Adult ♂ Coll. Lake Edward, Quebec, Canada. T. Surber.
34–36. Adult ♀ Coll. Lake Edward, Quebec, Canada. T. Surber.
37. Adult ♀ Coll. Dalhousie, New Brunswick, Canada. T. Surber.

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38–39. Adult ♂ Coll. Restigouche River, New Brunswick, Canada. T. Surber.

40. Adult ♀ Coll. Restigouche River, New Brunswick, Canada. T. Surber.

41. Adult ♂ Coll. Metapedia River, Quebec, Canada. T. Surber.

42–45. Adult ♂ Coll. Rivière du Loup, Quebec, Canada. T. Surber.

46. Adult ♀ Coll. Rivière du Loup, Quebec, Canada. T. Surber.

47. Adult ♂ Coll. Murray Bay, Quebec, Canada. T. Surber.

48. Adult ♂ P. Hamlington, Minnesota. Ward's Nat. Scien. Establ., Rochester, N. Y.

49. Adult—Pres. Jackson Park, Chicago, Illinois. H. W. Clark.

a. Blarina brevicauda carolinensis (Bachman).

Sorex carolinensis Bachm., Jour. Acad. Nat. Scien. Phil., 1837, p. 366.

Blarina brevicauda carolinensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 383. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 461. Zoöl. Ser.

CAROLINA SHREW.

1. Adult ♂ Coll. Apex, North Carolina. T. Surber.

2. Adult ♀ Exch. Raleigh, North Carolina. Am. Mus. Nat. Hist. N. Y. H. H. & C. S. Brimley.

3. Adult — P. Raleigh, North Carolina. Ward's Nat. Scien. Establ., Rochester, N. Y.

b. Blarina brevicauda hylophaga Elliot.

Blarina brevicauda hylophaga Elliot, Pub. Field Columb. Mus., I, 1899, p. 287. Zoöl. Ser. *Id.* Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 383. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 461. Zoöl. Ser.

WOOD SHREW.

1. Adult ♂ Type. Coll. Dougherty, Indian Territory. T. Surber.

2. Adult ♀ Paratype. Coll. Dougherty, Indian Territory. T. Surber.

Subgenus B. **Cryptotis.**

828. Blarina parva (Say).

Sorex parvus Say, Long's Exped. Rocky Mts., I, 1823, p. 163.

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Sorex cinereus Bachm., Jour. Acad. Nat. Scien. Phil., 1837, p. 373, pl. XXIII, fig. 3.

Blarina exilipes Baird, N. Am. Mamm., 1857, p. 51.

Blarina eximius Baird, N. Am. Mamm., 1857, p. 52.

Blarina parva Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 384, fig. 75. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 463. Zoöl. Ser.

SMALL SHREW.

1. Adult ♀ Exch. Raleigh, North Carolina. Am. Mus. Nat. Hist. N. Y. H. H. & C. S. Brimley.

2–5. Adult ♂ Coll. White Sulphur Springs, West Virginia. T. Surber.

6. Adult ♂ P. Warsaw, Illinois. C. K. Worthern.

7. Adult ♀ P. Warsaw, Illinois. C. K. Worthern.

829. Blarina floridana Merriam.

Blarina floridana Merr., N. Am. Faun., No. 10, 1895, p. 19, pl. I, fig. 7. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 385. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 463. Zoöl. Ser.

FLORIDA SHREW.

1. Adult ♀ Coll. Enterprise, Florida. T. Surber.

830. Blarina pergracilis Elliot.

Blarina pergracilis Elliot, Pub. Field Columb. Mus., III, 1903, p. 149. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 557, figs. 104, LXXXII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 463. Zoöl. Ser.

FIG. LXIII. BLARINA PERGRACILIS. OCOTLAN SLENDER SHREW.

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OCOTLAN SLENDER SHREW.

1. Adult ♂ Type. Coll. Ocotlan, State of Jalisco, Mexico. F. E. Lutz.

Genus 240. **Neomys.**

Neomys Kaup, Entw.-Gesch. & Natürl. Syst. Europ. Thierwelt, I, 1829, p. 117. Type *Sorex daubentonii* Erxleben=*Sorex fodiens* Schreber.

Crossopus Wagl., Isis, 1832, p. 275.

Hydro-Sorex Duvern., Mém. Mus. Hist. Nat. Strassb., II, 1835, p. 17.

Myosictis Pomel, Cat. Méth. Vert. Foss. Bassin Loire, 1854, p. 14.

831. Neomys fodiens (Schreber).

Sorex fodiens Schreber, Säugth., III, 1777, p. 571, pl. CLXI.

Sorex daubentonii Erxl., Syst. Regn. Anim., 1777, p. 124.

PALÆARCTIC WATER SHREW.

1. Adult — P. England. Ward's Nat. Scien. Establ., Rochester, N. Y.

Subfamily II. **Crocidurinæ.**

Genus 241. **Crocidura.**

Crocidura Wagl., Isis, 1832, p. 275. Type *Sorex leucodon* Hermann.

Suncus Hempr. & Ehrenb., Symb. Phys., Mamm., II, 1832, sig. K.

Pachyura Sélys-Longch., Étud. de Micromamm., 1839, pp. 32, 142. (nec Agassiz, 1829, Pisces.)

Leucodon Fatio, Faun. Vertéb. Suisse, Mamm., I, 1869, pp. 132–134, 137–139.

Subgenus A. **Crocidura.**

832. Crocidura russulus (Hermann).

Sorex araneus Linn., Syst. Nat., I, 1758, p. 53; I, 1766, p. 74. (Part.)

Sorex russulus Herm., Zimm. Geogr. Gesch., II, 1780, p. 282.

Sorex myoides Blanf., Jour. Asiat. Soc. Beng., XLIV, Pt. 2, 1875, p. 106.

Crocidura aranea Blanf., Faun. Brit. Ind., Mamm., 1888–91, p. 243.

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SPIDER SHREW.

1. Adult — P. "Germany." Ward's Nat. Scien. Establ., Rochester, N. Y.

Subgenus B. **Pachyura.**

833. Crocidura madagascariensis Coquerel.

Sorex madagascariensis Coquer., Ann. Scien. Nat., IX, 1848, p. 193, pl. 11, fig. 1.

MADAGASCAR SHREW.

1. Adult — P. Madagascar. C. I. Forsyth-Major.

Family VI. **Talpidæ. Moles.**

Subfamily I. **Desmaninæ.**

Genus 242. **Desmana.**

Desmana Gülden., Besch. Berl. Gesell. Naturf. Freunde, III, 1777, p. 108. Type *Castor moschatus* Linnæus.

Mygalus Retz., Animad. Class. Mamm. Linn., 1796, p. 22.

Mygale G. Cuv., Leçons Anat. Comp., I, 1800, tabl. I.

Myogalea Fisch., Syn. Mamm., 1829, p. 250.

Galemys Kaup, Entw.-Gesch. Natürl. Syst. Europ. Thierwelt, I, 1829, p. 118.

Caprios Wagl., Nat. Syst. Amphib., 1830, p. 14.

Myogale Brandt, Wiegm. Archiv f. Naturgesch., I, 1836, p. 176.

834. Desmana moschata (Linnæus).

Castor moschatus Linn., Syst. Nat., I, 1758, p. 59; I, 1766, p. 79.

Sorex moschata Pall., Act. Acad. Scien. Imp. Petrop., II, 1781, p. 315. *Id.* Zoogr. Rosso-Asiat., 1831, p. 1.

THE DESMAN.

1. Adult — P. Sarepta, South Russia. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 243. **Neurotrichus. Shrew-like Moles.**

Neurotrichus Günther, Proc. Zoöl. Soc., 1880, p. 441. Type *Urotrichus gibbsii* Baird.

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835. Neurotrichus gibbsi (Baird).

Urotrichus gibbsii Baird, N. Am. Mamm., 1857, p. 76.

Neurotrichus gibbsi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 387, fig. 77. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 466. Zoöl. Ser.

GIBBS'S SHREW MOLE.

1. Adult ♂ P. Sumas, British Columbia, Canada. C. K. Worthern.
2. Adult ♀ P. Sumas, British Columbia, Canada. C. K. Worthern.
3. Adult ♂ P. Palo Alto, California. E. Heller.

a. Neurotrichus gibbsi major Merriam.

Neurotrichus gibbsi major Merr., N. Am. Faun., No. 16, 1899, p. 88. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 387. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 467. Zoöl. Ser.

LARGE SHREW MOLE.

1–4. Adult ♂ Coll. Eureka, California. E. Heller.
5–6. Adult ♀ Coll. Eureka, California. E. Heller.
7. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.

Subfamily II. **Talpinæ.**

Genus 244. **Talpa.**

Talpa Linn., Syst. Nat., I, 1758, p. 52; I, 1766, p. 73. Type *Talpa europæa* Linnæus.

836. Talpa europæa Linnæus.

Talpa europæa Linn., Syst. Nat., I, 1758, p. 52; I, 1766, p. 73.

EUROPEAN MOLE.

1. Adult — P. England. Ward's Nat. Scien. Establ., Rochester, N. Y.
2–5. Adult ♂ P. Andermatt, Switzerland. J. A. Loring.
6–12. Adult ♀ P. Andermatt, Switzerland. J. A. Loring.
13–14. Adult ♂ P. Meiringen, Switzerland. J. A. Loring.
15. Adult ♀ P. Meiringen, Switzerland. J. A. Loring.

Genus 245. **Condylura. Star-nosed Moles.**

Condylura Illig., Prodr. Syst. Mamm. et Av., 1811, p. 125. Type *Sorex cristatus* Linnæus.

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Astromycter Harris, Am. Journ. Sci. & Arts, IX, 1825, p. 400.
Rhinaster Wagl., Nat. Syst. Amphib., 1830, p. 14.
Astromyctes Gray, List Spec. Mamm. Brit. Mus., 1843, pp. XXI, 76. (nomen nudum.)
Astromydes Blyth, Cat. Mamm. Asiat. Soc. Mus., 1863, p. 87.

837. Condylura cristata (Linnæus).
Sorex cristatus Linn., Syst. Nat., I, 1758, p. 53.
Talpa longicaudata Erxl., Syst. Regn. Anim., I, 1777, p. 118.
Talpa radiata Shaw, Gen. Zoöl., Mamm., I, 1800, p. 523.
Condylura macroura Harl., Faun. Amer., 1825, p. 36.
Condylura prasinata Harris, Bost. Jour. Phil. & Arts, 1825, p. 582.
Condylura cristata Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 395, fig. 81. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 467. Zoöl. Ser.

STAR-NOSED MOLE.
1. Adult ♂ P. Lansing, New York. C. K. Worthern.
2. Adult ♀ P. Oswego, New York. D. D. Scott.
3. Adult — P. New York. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 246. **Scapanus. Western Moles.**

Scapanus Pomel, Archiv. Scien. Phys. & Nat., Bibl. Univ. Genève, 4e Sér., IX, 1848, p. 247. Type, by elimination, *Scalops townsendii* Bachman.

838. Scapanus townsendi (Bachman).
Scalops canadensis Rich., Faun. Bor. Am., Mamm., I, 1829, p. 9. (nec Desmarest, nec Harlan.)
Scalops townsendii Bachm., Jour. Acad. Nat. Scien. Phil., 1839, p. 58.
Scalops latimanus Bachm., Bost. Jour. Nat. Hist., 1843, p. 41.
Scalops metallescens Cass., Proc. Acad. Nat. Scien. Phil., 1853, p. 242.
Scalops æneus Cass., Proc. Acad. Nat. Scien. Phil., 1853, p. 299.
Talpa tæniata Le Conte, Proc. Acad. Nat. Scien. Phil., 1853, p. 327.
Scapanus townsendi Elliot, Syn. N. Am. Mamm., F. C. M. Pub.,

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II, 1901, p. 391, fig. 79. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 468. Zoöl. Ser.

TOWNSEND'S MOLE.

1–4. Adult ♂ Coll. Crescent City, California. E. Heller.
5. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.
6. Adult — Coll. Hot Springs Trail, Clallam County, Washington. D. G. Elliot.
7. Adult — P. Tacoma, Washington. Ward's Nat. Scien. Establ., Rochester, N. Y.

839. Scapanus orarius True.

Scapanus orarius True, Proc. U. S. Nat. Mus., XIX, 1896, p. 52. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 392. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 468. Zoöl. Ser.

COAST MOLE.

1. Adult ♂ Coll. Crescent City, California. E. Heller.
2. Adult ♀ Coll. Mendocino, California. E. Heller.

840. Scapanus californicus (Ayres).

Scalops californicus Ayres, Proc. Calif. Acad. Nat. Scien., I, 1855, p. 54.

Scapanus dilatus True, Proc. U. S. Nat. Mus., 1894, p. 242.

Scapanus californicus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 392. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 468. Zoöl. Ser.

CALIFORNIA MOLE.

1. Adult ♂ Coll. Mendocino, California. E. Heller.
2. Adult ♀ Coll. Mendocino, California. E. Heller.
3. Adult ♂ Coll. Nicasio, California. E. Heller.
4. Adult ♀ Coll. Nicasio, California. E. Heller.
5. Adult ♂ Coll. Stevens Creek, California. E. Heller.

Genus 247. **Scalopus. Common Moles.**

Scalopus Geoff., Cat. Mamm. Mus. Hist. Nat. Paris, 1803, pp. 77, 78. Type *Scalopus virginianus* Geoffroy = *Sorex aquaticus* Linnæus.

Scalops Illig., Prodr. Syst. Mamm. et Av., 1811, p. 126.

841. Scalopus aquaticus (Linnæus).

Sorex aquaticus Linn., Syst. Nat., I, 1758, p. 53.

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Talpa europæa flavescens Erxl., Syst. Reg. Anim., 1777, p. 118.
Talpa europæa flava Gmel., Syst. Nat., I, 1788, p. 112.
Talpa flava Kerr, Anim. Kingd., 1792, p. 201.
Talpa fusca Kerr, Anim. Kingd., 1792, p. 202.
Talpa cupreata Rafin., Préc. découv. trav. somiol. Palerme, 1814, p. 14.
Scalops canadensis Desm., Mamm., 1820, p. 155.
Scalops pennsylvanica Harl., Faun. Amer., 1825, p. 33.
Talpa pennantii Le Conte, Proc. Acad. Nat. Scien. Phil., 1853, p. 327.
Scalops aquaticus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 389, fig. 78. Zoöl. Ser.
Scalopus aquaticus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 469. Zoöl. Ser.

COMMON MOLE.

1–2. Adult ♂ Exch. Central Park, New York. Am. Mus. Nat. Hist. N. Y.
3. Adult ♀ Exch. Central Park, New York. Am. Mus. Nat. Hist. N. Y.
4. Adult ♂ Exch. Hastings, New York. Am. Mus. Nat. Hist. N. Y. J. Rowley.
5. Adult ♂ Exch. Weaverville, North Carolina. Am. Mus. Nat. Hist. N. Y. J. S. Cairns.
6. Adult — Pres. Long Island, New York. T. H. Bean.
7. Adult ♂ Coll. Apex, North Carolina. T. Surber.
8. Adult ♂ Coll. Calhoun Falls, South Carolina. T. Surber.
9–10. Adult ♂ Coll. Catawba, South Carolina. T. Surber.
11. Adult — P. New York. Ward's Nat. Scien. Establ., Rochester, N. Y.
12. Adult ♂ Pres. Nashville, Tennessee. E. B. Williamson. L. C. Glen.
13. Adult ♀ Pres. Nashville, Tennessee. E. B. Williamson. L. C. Glen.

a. Scalopus aquaticus machrinus (Rafinesque).
Talpa machrina Rafin., Atlantic Journ., I, 1832, p. 61.
Talpa sericea Rafin., Atlantic Journ., I, 1832, p. 61.
Scalops argentatus Aud. & Bachm., Jour. Acad. Nat. Scien. Phil., 1842, p. 292.
Scalops aquaticus machrinus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 389. Zoöl. Ser.
Scalopus aquaticus machrinus Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 470. Zoöl. Ser.

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LARGE-NOSED MOLE.

1–2. Adult ♂ Pres. Greenway, Arkansas. L. Mitchell.
3–5. Adult ♀ Pres. Greenway, Arkansas. L. Mitchell.
6–7. Juv. — Pres. Greenway, Arkansas. L. Mitchell.
8–14. Adult ♂ Pres. Oakwoods Cemetery, Chicago, Illinois. M. Kane.
15–16. Adult ♀ Pres. Oakwoods Cemetery, Chicago, Illinois. M. Kane.
17. Adult ♂ P. Warsaw, Illinois. C. K. Worthern.
18. Adult — Pres. Brookdale, Illinois. P. Glenn.
19. Adult ♀ Pres. Jackson Park, Chicago. L. Kenkel.

b. Scalopus aquaticus intermedius (Elliot).

Scalops machrinus intermedius Elliot, Pub. Field Columb. Mus., I, 1899, p. 280. Zoöl. Ser.

Scalops aquaticus intermedius Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 390. Zoöl. Ser.

Scalopus aquaticus intermedius Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 470. Zoöl. Ser.

INTERMEDIATE MOLE.

1–4. Adult ♂ Type and paratypes. Coll. Alva, Oklahoma Territory. T. Surber.
5–6. Adult ♀ Paratypes. Coll. Alva, Oklahoma Territory. T. Surber.
7. Adult ♂ Coll. Dougherty, Indian Territory. T. Surber.

c. Scalopus aquaticus australis (Chapman).

Scalops aquaticus australis Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1893, p. 339. Elliot, Pub. Field Columb. Mus., III, 1901, p. 56. Zoöl. Ser.

Scalops parvus Rhoads, Proc. Acad. Nat. Scien. Phil., 1894, p. 157.

Scalops anastasiæ Bangs, Proc. Bost. Soc. Nat. Hist., 1898, p. 212. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 391. Zoöl. Ser.

Scalops aquaticus parvus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 390. Zoöl. Ser.

Scalopus aquaticus australis Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 470. Zoöl. Ser.

FLORIDA MOLE.

1. Adult ♂ Coll. Espanita, Anastasia Island, Florida. T. Surber.
2–4. Adult ♀ Coll. Espanita, Anastasia Island, Florida. T. Surber.

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5. Adult ♂ Topotype. Coll. Gainesville, Florida. T. Surber.
6–8. Adult ♀ Topotypes. Coll. Gainesville, Florida. T. Surber.
9–11. Adult ♂ Coll. New Berlin, Florida. T. Surber.
12. Adult ♂ Coll. St. Charles Creek, Florida. T. Surber.
13. Adult ♂ Coll. Enterprise, Florida. T. Surber.
14–15. Adult ♀ Coll. Enterprise, Florida. T. Surber.
16. Juv. ♂ Coll. Enterprise, Florida. T. Surber.

d. Scalopus aquaticus texensis (Allen).

Scalops argentatus texanus! Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 221.

Scalops aquaticus texensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 390. Zoöl. Ser.

**Scalopus aquaticus texensis* Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 471. Zoöl. Ser.

TEXAS MOLE.

1. Adult ♂ Exch. Rockport, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.

Genus 248. **Parascalops. Hairy-tailed Moles.**

Parascalops True, Proc. U. S. Nat. Mus., XVII, 1894, p. 242. Type *Scalops breweri* Bachman.

842. Parascalops breweri (Bachman).

Scalops breweri Bachm., Bost. Jour. Nat. Hist., 1841, p. 32.

Parascalops breweri Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 394, fig. 80. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 471. Zoöl. Ser.

BREWER'S HAIRY-TAILED MOLE.

1. Adult ♂ P. Lansing, New York. C. K. Worthern.
2. Adult ♀ P. Lansing, New York. C. K. Worthern.
3. Adult ♂ Coll. White Sulphur Springs, West Virginia. T. Surber.
4. Adult ♀ Coll. White Sulphur Springs, West Virginia. T. Surber.

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*In the Check-L. Mamm. N. Amer. Cont. etc., the type locality of this species was erroneously given as Aransas County? instead of Presidio Co., Texas.

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Family VII. **Solenodontidæ.**

Genus 249. **Solenodon. Almiqui & Agouta.**

Solenodon Brandt, Mém. Acad. Imp. Scien. St. Pétersb., 6e Sér., II, 1833, p. 459. Type *Solenodon paradoxus* Brandt.

843. Solenodon cubanus Peters.

Solenodon cubanus Peters, Abh. K. Preuss. Akad. Wiss. Berl., 1863, p. 2, pl. III. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 567, figs. 106, LXXXIV. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 472. Zoöl. Ser.

FIG. LXIV. SOLENODON CUBANUS. ALMIQUI.

ALMIQUI.

1. Adult ♂ P. Cuba. Ward's Nat. Scien. Establ., Rochester, N. Y

Family VIII. **Tenrecidæ.**

Subfamily I. **Tenrecinæ.**

Genus 250. **Tenrec.**

Tenrec Lacép., Tabl. Mamm., 1799, p. 7. Type *Tenrec ecaudatus* Lacépède = *Erinaceus ecaudatus* Schreber.

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Centetes Illig., Prodr. Syst. Mamm. et Av., 1811, p. 124.
Setiger G. Cuv., Leç. Anat. Comp., I, 1800, tabl. I. (nomen nudum.)

844. Tenrec ecaudatus (Schreber).
Erinaceus ecaudatus Schreb., Säugth., III, 1778, p. 584, pl. CLXV. Gmel., Syst. Nat., 1788, p. 117.
Centetes ecaudatus Dobson, Mon. Insect., Pt. I, 1882, p. 68, pl. VII.
TAILLESS TENREC.
1–7. Adult & juv.—Group. P. Madagascar. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 251. **Hemicentetes.**

Hemicentetes Mivart, Proc. Zoöl. Soc., 1871, p. 58, pl. V. Type *Erinaceus madagascariensis* Shaw = *Erinaceus semispinosus* Cuvier.

845. Hemicentetes semispinosus (Cuvier).
Erinaceus semispinosus Cuv., Tabl. Élément. Hist. Nat., 1798, p. 108.
Setiger variegatus E. Geoff., Cat. Mamm., 1803.
Hemicentetes madagascariensis Mivart, Proc. Zoöl. Soc., 1871, p. 58, fig.
Ericulus nigricans Bartl., Proc. Zoöl. Soc., 1875, p. 64.
Hemicentetes variegatus Jentink, Notes Leyd. Mus., 1879, p. 148.
SMALL-SPINED TENREC.
1 Adult ♀ P. Madagascar. C. I. Forsyth-Major.

846. Hemicentetes nigriceps Günther.
Hemicentetes nigriceps Günth., Ann. Mag. Nat. Hist., 4th Ser., XVI, 1875, p. 125.
Hemicentetes variegatus var. *buffoni* Jentink, Notes Leyd. Mus., 1879, p. 150.
BLACK-HEADED TENREC.
1. Adult ♂ P. Madagascar. C. I. Forsyth-Major.

Genus 252. **Setifer.**

Setifer Froriep, in Duméril, Analyt. Zool. aus Franz. mit Zusätzen, 1806, p. 15. Type *Erinaceus setosus* Schreber.
Ericulus I. Geoff., Ann. Sci. Nat. Paris, 2me Sér., VIII, 1837, p. 60.

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847. Setifer setosus (Schreber).

Erinaceus setosus Schreb., Säugth., III, 1778, p. 583, pl. CLXIV. Gmel., Syst. Nat., 1788, p. 117.

Setiger setosus Jent., Notes Leyd. Mus., 1879, p. 142.

Ericulus setosus Dobson, Mon. Insect., Pt. I, 1882, p. 71.

SPINY TENREC.

1. Adult — P. Madagascar. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 253. **Microgale.**

Microgale Thomas, Jour. Linn. Soc. Lond., Zoöl., XVI, 1882, p. 319. Type *Microgale longicaudata* Thomas.

848. Microgale cowani Thomas.

Microgale cowani Thos., Jour. Linn. Soc. Lond. Zoöl., XVI, 1882 p. 320. Dobson, Mon. Insect., Pt. II, 1883, p. 86B, pl. VIII, figs. 4, 4e.

COWAN'S MICROGALE.

1. Adult ♂ P. Madagascar. C. I. Forsyth-Major.
2. Adult ♀ P. Madagascar. C. I. Forsyth-Major.

a. Microgale cowani nigrescens Elliot.

Microgale cowani nigrescens Elliot, Proc. Biol. Soc. Wash., XVIII, 1905, p. 237.

FORSYTH-MAJOR'S MICROGALE.

1. Adult — Type. P. Madagascar. C. I. Forsyth-Major.

849. Microgale dobsoni Thomas.

Microgale dobsoni Thos., Ann. Mag. Nat. Hist., 5th Ser., 1884, p. 337

DOBSON'S MICROGALE.

1. Adult ♀ P. Madagascar. C. I. Forsyth-Major.

850. Microgale pusillus Forsyth-Major.

Microgale pusillus Forsyth-Major, Ann. Mag. Nat. Hist., 6th Ser., XVIII, 1896, p. 462.

LITTLE MICROGALE.

1. Adult — P. Madagascar. C. I. Forsyth-Major.

Genus 254. **Oryzoryctes.**

Oryzorictes! Grandidier, Rev. Mag. Zool., 2me Sér., XXII, 1870, p 50. Type *Oryzorictes! hova* Grandidier.

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851. Oryzoryctes hova Grandidier.

Oryzorictes! hova Grand., Rev. Mag. Zool., 2me Sér., XXII, 1870, p. 50. Dobson, Mon. Insect., Pt. I, 1882, p. 72.

MADAGASCAR RICE-DIGGER.

1. Adult — P. Madagascar. C. I. Forsyth-Major.

852. Oryzoryctes tetradactylus A. Milne-Edwards & Grandidier.

Oryzorictes! tetradactylus A. Milne-Edw. & Grand., Le Naturaliste, IV, 1882, p. 55.

FOUR-TOED RICE-DIGGER.

1–2. Adult ♂ P. Madagascar. C. I. Forsyth-Major.
3. Adult ♀ P. Madagascar. C. I. Forsyth-Major.

853. Oryzoryctes niger Forsyth-Major.

Oryzoryctes niger F.-Major, Ann. Mag. Nat. Hist., 6th Ser., XVIII, 1896, p. 321.

BLACK RICE-DIGGER.

1. Juv. ♀ P. Madagascar. C. I. Forsyth-Major.

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Order X. **Chiroptera. Bats.**

Family I. **Pteropodidæ. Fruit Bats.**

Subfamily I. **Pteropodinæ.**

Genus 255. **Epomophorus.**

Epomophorus Bennett, Proc. Zoöl. Soc., 1835, p. 149. Type *Pteropus epomophorus* Bennett=*Pteropus macrocephalus* Ogilby.

Subgenus A. **Epomophorus.**

854. Epomophorus gambianus (Ogilby).

Pteropus gambianus Ogilby, Proc. Zoöl. Soc., 1835, p. 100.

Epomophorus crypturus Peters, Reis. nach Mossamb., Zool., I, Säugeth., 1852, p. 26, pl. V, pl. XIII, figs. 1–6.

GAMBIA FRUIT BAT.

1. Adult — P. West Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 256. **Pteropus.**

Pteropus Briss., Regn. Anim., 2d ed., 1762, p. 153. Type *Pteropus pteropus* Brisson=*Vespertilio vampyrus* Linnæus. (Part.

855. Pteropus edwardsi Geoffroy.

Pteropus edwardsii Geoff., Ann. Mus. Hist. Nat. Paris, XV, 1810, p. 92.

Pteropus phaiops Temm., Mon. Mamm., I, 1827, p. 178.

MILNE-EDWARDS'S FRUIT BAT.

1. Adult — P. "Ceylon." Ward's Nat. Scien. Establ., Rochester, N. Y.

856. Pteropus celaeno Hermann.

Pteropus celaeno Herm., Obs. Zoöl., I, 1804, p. 13.

Pteropus edulis E. Geoff., Ann. Mus. Hist. Nat. Paris, 1810, p. 90.

Pteropus javanicus Desm., Mamm., 1820, p. 109.

Pteropus funereus Temm., Mon. Mamm., II, 1835–41, p. 63.

Pteropus pluton Temm., Esquis. Zool., 1853, p. 56.

HARPY FRUIT BAT.

1. Adult — P. "Java." Ward's Nat. Scien. Establ., Rochester, N. Y.

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2. Adult — P. "Australia". Ward's Nat. Scien. Establ., Rochester, N. Y.
3. Adult ♂ P. Island of Leyte, Philippines. J. B. Steere.
4. Adult ♀ P. Island of Leyte, Philippines. J. B. Steere.

857. Pteropus rubricollis Geoffroy.

Pteropus rubricollis Geoff., Ann. Mus. Hist. Nat. Paris, xv, 1810, p. 93.

MAURITIUS FRUIT BAT.

1. Adult — P. Mauritius. Ward's Nat. Scien. Establ., Rochester, N. Y.

858. Pteropus woodfordi Thomas.

Pteropus woodfordi Thos., Ann. Mag. Nat. Hist., 6th Ser, I, 1888, p. 156.

WOODFORD'S FRUIT BAT.

1. Adult ♂ P. Solomon Islands. E. Gerrard & Sons.

859. Pteropus capistratus Peters.

Pteropus capistratus Peters, Monatsb. K. Preuss. Akad. Wiss. Berlin, 1876, p. 316.

DUKE OF YORK ISLAND FRUIT BAT.

1. Adult — P. Duke of York Island. Ward's Nat. Scien. Establ., Rochester, N. Y.

860. Pteropus poliocephalus Temminck.

Pteropus poliocephalus Temm., Mon. Mamm., I, 1827, p. 179.

AUSTRALIAN FRUIT BAT.

1. Adult — P. Australia. Ward's Nat. Scien. Establ., Rochester, N. Y.

861. Pteropus hypomelanus Temminck.

Pteropus hypomelanus Temm., Esquis. Zool., 1853, p. 61.

Pteropus tricolor Gray, Cat. Monkeys, Lemurs and Fruit-eating Bats Brit. Mus., 1870, p. 108.

Pteropus spectrum Matschie, Abhandl. Senckenb. Ges., XXV, 1901, p. 268, pl. 12.

TRICOLOR FRUIT BAT.

1–2. Adult ♂ P. Concepcion, Island of Panay, Philippines. J. B. Steere.
3–4. Adult ♀ P. Concepcion, Island of Panay, Philippines. J. B. Steere.
5. Adult ♂ P. Guimaras, Island of Panay, Philippines. J. B. Steere.
6. Adult ♀ P. Guimaras, Island of Panay, Philippines. J. B. Steere.

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862. Pteropus ualanus Peters.

Pteropus ualanus Peters, Sitzungsb. Gesell. Natur. Freund. Berl., 1883, p. 1.

CAROLINE ISLANDS FRUIT BAT.

1. Adult ♂ Pres. Caroline Islands. A. G. Maddren.
2–4. Adult ♀ Pres. Caroline Islands. A. G. Maddren.

863. Pteropus melanopogon Schlegel.

Pteropus phaiops Temm., Mon. Mamm., II, 1835–41, p. 65. (Part.)

Pteropus melanopogon Schleg., Peters, Monatsb. K. Preuss. Akad. Wiss. Berlin, 1867, p. 330. Dobson, Cat. Chirop. Brit. Mus., 1878, p. 44.

SCHLEGEL'S FRUIT BAT.

1. Adult — P. "Duke of York Island" ? Ward's Nat. Scien. Establ., Rochester, N. Y.

864. Pteropus jubatus Eschscholtz.

Pteropus jubatus Eschsch., Zool. Atl., IV, 1831, p. 1, pl. 16. Temm., Mon. Mamm., II, 1835–41, p. 51.

Pteropus pyrrocephalus! Meyen, Nov. Act. Acad. Cæs. Leop.-Carol. Nat. Cur., XVI, p. 604.

MANED FRUIT BAT.

1. Adult — P. Singapore, Malacca. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♂ P. Concepcion, Island of Panay, Philippines. J. B. Steere.
3. Adult ♀ P. Concepcion, Island of Panay, Philippines. J. B. Steere.

865. Pteropus aurinuchalis Elliot.

Pteropus auri-nuchalis Elliot, Pub. Field Columb. Mus., I, 1896, p. 77, pl. XII. Zoöl. Ser.

GOLDEN-NAPED FRUIT BAT.

1–2. Adult ♂ Type. and paratype. P. Island of Leyte, Philippines. J. B. Steere.

866. Pteropus lucifer Elliot.

Pteropus lucifer Elliot, Pub. Field Columb. Mus., I, 1896, p. 78, pl. XIII. Zoöl. Ser.

BLACK FRUIT BAT.

1–2. Adult ♂ Type and paratype. P. Concepcion, Island of Panay, Philippines. J. B. Steere.

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Genus 257. **Cynonycteris.**

Cynonycteris Peters, Naturw. Reise nach Mossambique, Zool., I, Säugeth., 1852, p. 25. Type *Pteropus collaris* Illiger.

867. Cynonycteris dupreana (Pollen).

Pteropus dupreanus Pollen, Schleg., Proc. Zoöl. Soc., 1866, p. 419.

Cynonycteris dupreana Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1867, p. 866.

POLLEN'S FRUIT BAT.

1. Adult ♂ P. Madagascar. C. I. Forsyth-Major.

868. Cynonycteris amplexicaudata (E. Geoffroy).

Pteropus amplexicaudatus E. Geoff., Ann. Mus. Hist. Nat. Paris, XV, 1810, p. 96.

Pteropus leschenaultii Desm., Mamm., 1820, p. 110.

Pteropus pyrivorus Hodgs., Jour. Asiat. Soc. Beng., 1835, p. 700.

Pteropus seminudus Kelaart, Jour. Asiat. Soc. Beng., 1852, p. 345.

Cynonycteris amplexicaudata Peters., Monatsb. K. Preuss. Akad. Wiss. Berl., 1867, p. 865.

Eleutherura marginata Gray, Cat. Monkeys, Lemurs and Fruit-eating Bats Brit. Mus., 1870, p. 118.

Eleutherura infumata Gray, Cat. Monkeys, Lemurs and Fruit-eating Bats Brit. Mus., 1870, p. 118.

Eleutherura philippinensis Gray, Cat. Monkeys, Lemurs and Fruit-eating Bats Brit. Mus., 1870, p. 119.

Cynonycteris infuscata Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1873, p. 487.

BIG-TAILED FRUIT BAT.

1–2. Adult — P. Dumaqueta, Philippine Islands. J. B. Steere.

Genus 258. **Cynopterus.**

Cynopterus F. Cuv., Dents des Mamm., 1825, p. 248. Type *Pteropus marginatus* Geoffroy = *Vespertilio sphinx* Vahl.

869. Cynopterus sphinx (Vahl).

Vespertilio sphinx Vahl, Skrivt. af Naturh.-Selsk., IV, Heft I, 1799, p. 123.

Pteropus marginatus E. Geoff., Ann. Mus. Hist. Nat. Paris, XIV, p. 97. Temm., Mon. Mamm., I, 1827, p. 202.

Cynopterus marginatus F. Cuv., Dents des Mamm., 1825, p. 248.

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Pteropus tittheæcheilus Temm., Mon. Mamm., I, 1827, p. 198.
Pachysoma diardii I. Geoff., Dict. Class. Hist. Nat., XIV, p. 705.
Pachysoma duvaucelii I. Geoff., Dict. Class. Hist. Nat., XIV, p. 705.
Pachysoma brevicaudatum I. Geoff., Dict. Class. Hist. Nat., XIV, p. 705.
Pteropus pyrivorus Hodg., Proc. Zoöl. Soc., 1836, p. 36.
Cynopterus horsfieldii Gray, List Spec. Mamm. Brit. Mus., 1843, p. 38.
Pachysoma luzoniense Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1861, p. 708.
Eleutherura marginata Gray, Proc. Zoöl. Soc., 1866, p. 64.

SPHINX BAT.

1. Adult ♂ P. Tulong River. E. Gerrard & Sons.
2. Adult ♀ P. Tulong River. E. Gerrard & Sons.
3. Adult — P. Balshore. E. Gerrard & Sons.
4. Adult — P. Sarawak, Borneo. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 259. **Nyctimene.**

Nyctimene Bechstein, in Penn. Allgem. Uebers. vierf. Thiere, II, 1800, pp. 615, 736. Type *Vespertilio cephalotes* Pallas.
Cephalotes Geoff., Ann. Mus. Hist. Nat. Paris, XV, 1810, pp. 104–106, tab. 7.
Harpyia Illig., Prodr. Syst. Mamm. et Avium, 1811, p. 118. (nec Ochsenheimer, 1810, Lepid.)

870. Nyctimene palliatus (Geoffroy).
Pteropus palliatus Geoff., Ann. Mus. Hist. Nat. Paris, XV, 1810, p. 99.
Cephalotes peronii Geoff., Ann. Mus. Hist. Nat. Paris, XV, 1810, p. 104, tab. 7.
Hypoderma moluccensis Quoy & Gaim., Voy. de l' 'Astrolabe,' I, 1830-33, p. 86, pl. XI.
Xantharpyia amplexicaudata Gray, Voy. 'Sulphur,' Mamm., 1844, p. 30.

PERON'S BAT.

1. Adult — P. Moluccas! E. Gerrard & Sons.

871. Nyctimene cephalotes (Pallas).
Vespertilio cephalotes Pall., Spicil. Zool., III, 1767, p. 10, figs. 1, 2.

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Harpyia pallasii Temm., Mon. Mamm., II, 1835–41, p. 101, pl. XL, figs. 1–5.

Harpyia cephalotes Wagn., Schreb. Säugth., Suppl., I, 1844, p. 370.

Cynopterus (*Uronycteris*) *albiventer* Gray, Proc. Zoöl. Soc., 1862, p. 262.

PALLAS'S BAT.

1. Adult — P. Kirwin Island, New Guinea. E. Gerrard & Sons.

Genus 260. **Bdelygma.**

Bdelygma Matschie, Flederm. Berl. Mus. Naturk., Lief I, 1899, p. 82. Type *Harpyia major* Dobson.

872. Bdelygma major (Dobson).

Harpyia major Dobson, Proc. Zoöl. Soc., 1877, p. 187, figs. 1–3. *Id.* Cat. Chiropt. Brit. Mus., 1878, p. 89.

HARPY BAT.

1. Adult — P. Duke of York Island. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 261. **Ptenochirus.**

Ptenochirus Peters, Monatsb. K. Preuss. Akad. Wiss. Berlin, Pt. II, 1861, p. 707. Type *Pachysoma jagorii* Peters.

873. Ptenochirus lucasii (Dobson).

Cynopterus (*Ptenochirus*) *lucasii* Dobson, Ann. Mag. Nat. Hist., 5th Ser., VI, 1880, p. 163.

LUCAS'S BAT.

1. Adult — P. Borneo. Ward's Nat. Scien. Establ., Rochester, N. Y.

Subfamily II. **Kiodotinæ.**

Genus 262. **Eonycteris.**

Eonycteris Dobson, Jour. Asiat. Soc. Beng., XLII, Pt. II, 1873, p. 204. Type *Macroglossus spelæus* Dobson.

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874. Eonycteris spelæa (Dobson).

Macroglossus spelæus Dobson, Proc. Asiat. Soc. Beng., 1871, p. 106.

Eonycteris spelæa Dobson, Jour. Asiat. Soc. Beng., 1873, p. 204, pl. XIV, fig. 10.

CAVE BAT.

1. Adult — P. Malay Peninsula. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 263. **Melonycteris.**

Melonycteris Dobson, Proc. Zoöl. Soc., 1877, p. 119. (June.) Type *Melonycteris melanops* Dobson.

Cheiropteruges Ramsay, Proc. Linn. Soc. N. S. Wales, II, 1877, p. 17. (July.)

875. Melonycteris melanops Dobson.

Melonycteris melanops Dobson, Proc. Zoöl. Soc., 1877, p. 119, figs. 4–7. (June.)

Pteropus (*Cheiropteruges*) *alboscapulatus* Ramsay, Proc. Linn. Soc. N. S. Wales, II, 1877, p. 17. (July.)

BLACK-FACED BAT.

1. Adult — P. Duke of York Island. Ward's Nat. Scien. Establ., Rochester, N. Y.

Family II. **Rhinolophidæ. Nose-leaf Bats.**

Subfamily I. **Rhinolophinæ.**

Genus 264. **Rhinolophus.**

Rhinolophus Lacép., Tabl. Mamm., 1799, p. 15. Type *Vespertilio ferrum-equinum* Schreber.

876. Rhinolophus pearsoni Horsfield.

Rhinolophus pearsonii Horsf., Cat. Mamm. Mus. E. Ind. Co., 1851, p. 33. Dobson, Mon. Asiat. Chiropt., 1876, p. 43, figs. a. b.

Rhinolophus larvatus A. Milne-Edwards, Mamm. Tibet, 1872, p. 248, pls. XXXVII, fig. 1, XXXVII c, fig. 1.

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FIG. LXV. RHINOLOPHUS FERRUM-EQUINUM. THE GREAT NOSE-LEAF BAT.

PEARSON'S NOSE-LEAF BAT.

1. Adult — P. India. Ward's Nat. Scien. Establ., Rochester, N. Y.

877. Rhinolophus luctus Temminck.

Rhinolophus luctus Temm., Mon. Mamm., II, 1835–1841, p. 24, pl. XXX.

Rhinolophus luctus var. *rufus* Eyd. & Gerv., Voy. 'Favorite,' Zool., 2me part., 1839.

Rhinolophus morio Gray, Ann. Mag. Nat. Hist., 1st. Ser., 1842, p. 257.

Rhinolophus perniger Hodgs., Jour. Asiat. Soc. Beng., XII, p. 414.

Aquias luctus Gray, Proc. Zoöl. Soc., 1847, p. 17.

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MOURNING NOSE-LEAF BAT.

1. Adult ♀ P. Kenai-Balu, Borneo. A. Everett. (Alcohol.)

878. Rhinolophus trifoliatus Temminck.

Rhinolophus trifoliatus Temm., Mon. Mamm., II, 1835–1841, p. 27, pl. 31.

Aquias trifoliatus Gray, Proc. Zoöl. Soc., 1847, p. 16.

TREFOIL NOSE-LEAF BAT.

1. Adult — P. Lawas Mountains, Borneo. E. Gerrard & Sons.

Subfamily II. **Hipposiderinæ.**

Genus 265. **Hipposiderus.**

Hipposideros! Gray, Zoöl. Misc., 1831, pp. 37–38. Type *Vespertilio speoris* Schneider.

879. Hipposiderus diadema (E. Geoffroy).

Rhinolophus diadema E. Geoff., Ann. Mus. Hist. Nat. Paris, XX, 1813, p. 263.

Rhinolophus nobilis Horsf., Zoöl. Research., 1822.

Rhinolophus griseus Meyen, Nov. Act. Acad. Cæs. Leop.-Carol., XVI, Pt. 2, p. 608.

Hipposideros! lankadiva Kelaart, Prodr. Faun. Zeyl., 1852–54, p. 15.

CROWNED BAT.

1–2. Adult — P. Guimaras, Philippine Islands. J. B. Steere.
3. Adult — P. Sarawak, Borneo. E. Gerrard & Sons.

880. Hipposiderus cyclops (Temminck).

Phyllorhina cyclops Temm., Esquiss. Zool. Guiné, 1853, p. 75.

CYCLOPS BAT.

1. Adult ♀ P. Benito River, West Africa. G. L. Bates.

881. Hipposiderus bicolor (Temminck).

Rhinolophus bicolor Temm., Mon. Mamm., II, 1835–1841, p. 18.

Phyllorhina antricola Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1861, p. 709.

BICOLORED BAT.

1. Adult — P. Palkai-Hügel. E. Hartert.

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Family III. **Nycteridæ.**

Subfamily I. **Megaderminæ.**

Genus 266. **Megaderma.**

Megaderma Geoff., Ann. Mus. Hist. Nat. Paris, xv, 1810, pp. 187–190, 197–198. Type *Vespertilio spasma* Linnæus.

882. Megaderma gigas Dobson.
Megaderma gigas Dobson, Proc. Zoöl. Soc., 1880, p. 461, pl. XLVI.
GREAT VAMPIRE BAT.
1. Adult — P. Australia. E. Gerrard & Sons.

Subfamily II. **Nycterinæ.**

Genus 267. **Nycteris.**

Nycteris Cuv. & Geoff., Méth. Mamm., in Mag. Encyclop., II, 1795, p. 186. Type *Vespertilio hispidus* Schreber.
Nicteris! Desm., Nouv. Dict. Hist. Nat., xv, 1803, p. 501.
Nycterus! Fisch., Zoogn., 1813, p. 18.

883. Nycteris hispida (Schreber).
Vespertilio hispidus Schreb., Säugth., I, 1775, p. 169, pl. LVI.
Nycteris daubentonii E. Geoff., Desc. Égypte, *1818, p. 113.
Rhinolophus martini Fraser, Proc. Zoöl. Soc., 1843, p. 25.
Nycterops pilosa Gray, Proc. Zoöl. Soc., 1866, p. 83.
Nycteris hispida Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1870, pl. figs. 1, 2.
HISPID VAMPIRE BAT.
1. Adult ♂ P. Upper Shire River, Brit. Central Africa. P. Rendall.

Family IV. **Vespertilionidæ. Common Bats.**

Subfamily I. **Vespertilioninæ.**

Genus 268. **Myotis.**

Myotis Kaup, Skizzirte Entw.-Gesch. u. Natürl. Syst. Europ. Thierw., I, 1829, p. 106. Type *Vespertilio murinus* Schreber=*Vespertilio myotis* Bechstein.

*See Sherborn, Proc. Zoöl. Soc., 1897, p. 285.

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Nystactes Kaup, Skizzirte Entw.-Gesch. u. Natürl. Syst. Europ. Thierw., I, 1829, pp. 106, 108–109.

Vespertilio Keyserl. & Blas., Wiegm. Archiv f. Naturg., 1839, p. 306. (nec Linn.)

Selysius Bonap., Iconog. Faun. Ital., I, 1841, Intr. p. 3.

Brachyotus Kolen., Allgem. Deutsch. Naturh. Zeit. Dresden, neue Folge, II, 1856, pp. 131, 174–177.

Isotus Kolen., Allgem. Deutsch. Naturh. Zeit. Dresden, neue Folge, II, 1856, pp. 131, 177–179.

Aeorestes Fitzing., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien, LXII, 1870, Abth. I, p. 427.

Comastes Fitzing., Sitzungsb. Math.-Nat. Cl. K. Akad. Wiss. Wien, LXII, 1870, Abth. I, p. 565.

884. Myotis velifer (J. A. Allen).

Vespertilio velifer J. A. Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 177.

Myotis velifer Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 401. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 573. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 473. Zoöl. Ser.

LARGE-WINGED BAT.

1–4. Adult ♂ Coll. La Palma, State of Michoacan, Mexico. F. E. Lutz.

5–9. Adult ♀ Coll. La Palma, State of Michoacan, Mexico. F. E. Lutz.

10–17. Adult — Coll. La Palma, State of Michoacan, Mexico. F. E. Lutz.

18–36. Adult ♂ Coll. La Palma, State of Michoacan, Mexico. F. E. Lutz. (Alcohol.)

37–77. Adult ♀ Coll. La Palma, State of Michoacan, Mexico. F. E. Lutz. (Alcohol.)

78–79. Adult ♂ Coll. Patzcuaro, State of Michoacan, Mexico. F. E. Lutz.

80–82. Adult ♀ Coll. Patzcuaro, State of Michoacan, Mexico. F. E. Lutz.

83–87. Adult ♂ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber. (Alcohol.)

88–93. Adult ♀ Coll. Xuchil, State of Vera Cruz, Mexico. Heller & Barber. (Alcohol.)

94–104. Adult ♂ Coll. Coyotes, State of Durango, Mexico. Heller & Barber. (Alcohol.)

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105–116. Adult ♀ Coll. Coyotes, State of Durango, Mexico. Heller & Barber. (Alcohol.)
117–118. Adult ♂ Coll. Esperanza, State of Puebla, Mexico. Heller & Barber. (Alcohol.)

885. Myotis evotis (H. Allen).

Vespertilio evotis H. Allen, Mon. N. Am. Bats, 1864, p. 48.
Myotis evotis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 406. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 574. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 474. Zoöl. Ser.

PROMINENT-EARED BAT.

1. Adult ♂ P. Huchuca Mountains, Arizona. W. W. Price.
2. Adult ♀ P. Huchuca Mountains, Arizona. W. W. Price.
3. Adult ♂ Coll. Mount Whitney, California. E. Heller.

886. Myotis milleri Elliot.

Myotis milleri Elliot, Pub. Field Columb. Mus., III, 1903, p. 172. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 575. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 474. Zoöl. Ser.

MILLER'S BAT.

1–2. Adult ♂ Type and paratype. Coll. La Grulla, Lower California, Mexico. E. Heller.

887. Myotis nigricans (Maximilian).

Vespertilio nigricans Max., Beitr. Natur. Bras., II, 1826, p. 266.
Vespertilio concinnus H. Allen, Proc. Acad. Nat. Scien. Phil., 1866, p. 280.
Myotis nigricans Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 575. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 475. Zoöl. Ser.

GRIZZLED BROWN BAT.

1. Adult — P. ————? E. Gerrard & Sons.

888. Myotis yumanensis (H. Allen).

Vespertilio yumanensis H. Allen, Mon. N. Amer. Bats, 1864, p. 58.
Myotis yumanensis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 403. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 576. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 475. Zoöl. Ser.

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FORT YUMA BAT.

1. Adult ♀ Coll. Fort Tejon, California. E. Heller.
2. Adult ♀ Coll. Argus Mountains, California. E. Heller.

a. Myotis yumanensis saturatus Miller.

Myotis yumanensis saturatus Miller, N. Am. Faun., No. 13, 1897, p. 68. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 403. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 577. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 475. Zoöl. Ser.

DARK YUMA BAT.

1. Adult — Coll. Boulder Lake, Clallam County, Washington. D. G. Elliot.
2. Adult — P. Chiliwack, British Columbia, Canada. C. K. Worthern.

889. Myotis orinomus Elliot.

Myotis orinomus Elliot, Pub. Field Columb. Mus., III, 1903, p. 228. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 577. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 476. Zoöl. Ser.

LA GRULLA BROWN BAT.

1–2. Adult ♂ Type and paratype. Coll. La Grulla, Lower California, Mexico. E. Heller.
3. Adult ♀ Coll. Santa Eulalia, Lower California, Mexico. E. Heller.

890. Myotis californicus (Audubon & Bachman).

Vespertilio californicus Aud. & Bachm., Jour. Acad. Nat. Scien. Phil., 1842, p. 285.

Vespertilio nitidus H. Allen, Proc. Acad Nat. Scien. Phil., 1862 p. 247.

Vespertilio oregonensis H. Allen, Mon. N. Am. Bats, 1864, p. 61.

Vespertilio obscurus H. Allen, Proc. Acad. Nat. Scien. Phil., 1866, p. 281.

Vespertilio volans H. Allen, Proc. Acad. Nat. Scien. Phil., 1866, p. 282.

Vespertilio exilis H. Allen, Proc. Acad. Nat. Scien. Phil., 1866, p. 283.

Vespertilio tenuidorsalis H. Allen, Proc. Acad. Nat. Scien. Phil., 1866, p. 283.

Vespertilio yumanensis H. Allen, Proc. Acad. Nat. Scien. Phil., 1866, p. 283. (nec H. Allen, 1864.)

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Vespertilio melanorhinus Merr., N. Am. Faun., No. 3, 1890, p. 46.
Vespertilio nitidus henshawi H. Allen, Mon. N. Am. Bats, 1894, p. 103.
Vespertilio nigricans H. Allen, Mon. N. Am. Bats, 1894, p. 97. (nec Max., 1826.)
Myotis californicus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 403. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 578. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 476. Zoöl. Ser.

LITTLE CALIFORNIA BAT.

1. Adult ♂ P. White Mountains, Arizona. W. W. Price.
2. Adult ♂ P. S-B. Ranch, Arizona. W. W. Price.
3. Adult ♀ P. Chiricahua Mountains, Arizona. W. W. Price.
4. Adult ♀ P. Providentia Mines, State of Sonora, Mexico. J. Rowley.
5. Adult ♂ Coll. Mount Whitney, California. E. Heller.
6–9. Adult ♀ Coll. Mount Whitney, California. E. Heller.
10–11. Adult ♂ Coll. Fort Tejon, California. E. Heller.
12. Adult ♀ Coll. Fort Tejon, California. E. Heller.

a. Myotis californicus caurinus Miller.

Myotis californicus caurinus Miller, N. Am. Faun., No. 13, 1897, p. 72. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 404. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 477. Zoöl. Ser.

GRAHAM ISLAND BAT.

1. Adult ♂ P. Sumas, British Columbia, Canada. C. K. Worthern.

b. Myotis californicus pallidus Stephens.

Myotis californicus pallidus Steph., Proc. Biol. Soc. Wash., XIII, 1900, p. 153. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 405. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 579. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 477. Zoöl. Ser.

PALE BAT.

1. Adult ♂ Coll. Panamint Mts., Inyo County, California. E. Heller.
2–4. Adult ♀ Coll. Panamint Mts., Inyo County, California. E. Heller.
5. Adult ♂ Coll. Mesquite Valley, California. E. Heller.
6. Adult ♀ Coll. Mesquite Valley, California. E. Heller.

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891. Myotis subulatus (Say).

Vespertilio subulatus Say, in Long's Exped. Rocky Mts., II, 1823, p. 65.

Vespertilio gryphus var. (b) H. Allen, Mon. N. Am. Bats, 1894, p. 80.

Vespertilio gryphus var. *septentrionalis* Trouess., Cat. Mamm. t. Viv. q. Foss., 1897, p. 131.

Myotis subulatus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 405. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 580. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 478. Zoöl. Ser.

SMALL-WINGED BAT.

1. Adult — Pres. Mitchell, Indiana. S. E. Meek.
2–15. Adult ♂ Pres. Wyandotte Cave, Indiana. H. A. Rothrock.
16–42. Adult ♀ Pres. Wyandotte Cave, Indiana. H. A. Rothrock.
43. Adult ♀ Exch. Elmsford, New York. Am. Mus. Nat. Hist. N. Y. J. H. Healy.
44. Adult — P. Minnesota. Ward's Nat. Scien. Establ., Rochester, N. Y.

892. Myotis lucifugus (Le Conte).

Vespertilio lucifugus Le Conte, McMurtrie, Cuv. Anim. Kingd., I, 1831, App., p. 431.

Vespertilio affinis H. Allen, Mon. N. Am. Bats, 1864, p. 53.

Vespertilio carolii Dobson, Cat. Chirop. Brit. Mus., 1878, p. 325.

Vespertilio lucifugus austroriparius Rhoads, Proc. Acad. Nat. Scien. Phil., 1897, p. 227.

Myotis lucifugus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 402, fig. 84. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 580. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 478. Zoöl. Ser.

LITTLE BROWN BAT.

1–7. Adult ♀ P. White Sulphur Springs, West Virginia. T. Surber.
8–11. Adult ♂ P. Waterloo County, Ontario, Canada. G. F. Dippie.
12–13. Adult — Pres. Greenway, Arkansas. L. Mitchell.

a. Myotis lucifugus longicrus (True).

Vespertilio longicrus True, Science, VIII, 1886, p. 588.

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Vespertilio albescens H. Allen, Mon. N. Am. Bats, 1894, p. 92. (nec Geoffroy.)

Myotis lucifugus longicrus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 402. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 581. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 479. Zoöl. Ser.

TRUE'S BAT.

1. Adult ♂ Coll. Inyo Mountains, California. E. Heller.
2. Adult ♀ Coll. Inyo Mountains, California. E. Heller.

893. Myotis thysanodes Miller.

Vespertilio albescens evotis H. Allen, Mon. N. Am. Bats, 1894, p. 90. (nec H. Allen, 1864.)

Vespertilio albescens velifer H. Allen, Mon. N. Am. Bats, 1894, p. 93. (nec J. Allen, 1890.)

Myotis thysanodes Miller, N. Am. Faun., No. 13, 1897, p. 80. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 572. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 479. Zoöl. Ser.

Myotis evotis thysanodes Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 406. Zoöl. Ser.

FRINGED BAT.

1–2. Adult ♂ Coll. Patzcuaro, State of Michoacan, Mexico. S. E. Meek. (Alcohol.)

3. Adult ♀ Coll. Patzcuaro, State of Michoacan, Mexico. S. E. Meek. (Alcohol.)

Genus 269. **Lasionycteris.**

Lasionycteris Peters, Monatsb. K. Preuss. Akad. Wiss. Berlin, 1865, p. 648. Type *Vespertilio noctivagans* Le Conte.

Scotophilus H. Allen, Mon. N. Am. Bats, 1864, p. 27. (Part., nec Leach.)

Cnephaiophilus Fitzing., Sitzungsb. K. Akad. Wiss. Wien, LXII, 1870, Abth. I, p. 8.

Vesperides Coues, in Coues & Yarrow, Zoöl. Wheeler's Exped., 1875, p. 83.

Vesperugo Dobson, Cat. Chiropt. Brit. Mus., 1878, p. 183. (Part.)

894. Lasionycteris noctivagans (Le Conte).

Vespertilio noctivagans Le Conte, McMurtrie, Cuv. Anim. Kingd., Am. ed., I, 1831, p. 31.

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Vespertilio auduboni Harl., Am. Month. Jour. Geol. & Nat. Hist.. 1831, p. 220, pl. II.

Vespertilio pulverulentus Temm., Mon. Mamm., II, 1835–1841, p. 325.

Lasionycteris noctivagans Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 407, fig. 85. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 480. Zoöl. Ser.

NIGHT-WANDERING BAT.

1. Adult ♂ Pres. Jackson Park, Chicago, Illinois. E. B. Chope.
2–4. Adult ♀ Pres. Jackson Park, Chicago, Illinois. Chope & Kenkel.
5. Adult ♂ Pres. Oakwoods Cemetery, Chicago, Illinois. L. V. Kenkel.
6. Adult ♂ Pres. Glen Ellyn, Illinois. A. B. Wolcott.
7. Adult ♀ Coll. Minot, South Dakota. W. E. Snyder.
8. Adult — P. Red Deer River, Alberta, Canada. G. F. Dippie.
9. Adult ♂ P. Chiricahua Mts., Arizona. W. W. Price.
10. Adult ♀ P. Chiricahua Mts., Arizona. W. W. Price.

Genus 270. **Pipistrellus.**

Pipistrellus Kaup, Skizzirte Entwick.,Gesch. u. Natürl. Syst. d. Europ. Thierw., Th. I, 1829, pp. 97, 98. Type *Vespertilio pipistrellus* Schreber.

Vesperugo Keyserl. & Blas., Wiegm. Archiv f. Naturg., 5ter Jahrg., Bd. I, 1839, p. 312. (Part.)

Hypsugo Kolenati, Allgem. Deutsch. Naturh. Zeit. Dresden, neue Folge, II, 1856, pp. 131, 167–169.

Nannugo Kolenati, Allgem. Deutsch. Naturh. Zeit. Dresden, neue Folge, II, 1856, pp. 131, 169–172.

Scotophilus H. Allen, Mon. N. Am. Bats, 1864, p. 27. (Part., nec Leach.)

895. Pipistrellus hesperus (H. Allen).

Scotophilus hesperus H. Allen, Mon. N. Am. Bats, 1864, p. 43.

Vesperugo merriami Dobson, Cat. Chiropt. Brit. Mus., 1878, p. 228.

Pipistrellus hesperus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 409, fig. 86. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II. 1904. p. 582, figs. 108,

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LXXXVI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 480. Zoöl. Ser.

WESTERN BAT.

1. Adult ♀ P. Dulzura, California. L. A. Marsh.
2. Adult ♂ P. Chiricahua Mountains, Arizona. W. W. Price.
3–4. Adult ♂ Coll. San Felipe, Lower California, Mexico. E. Heller.
5. Adult ♂ Coll. San Matias Spring, Lower California, Mexico. E. Heller.
6–7. Adult ♀ Coll. Rosarito, Lower California, Mexico. E. Heller.
8–9. Adult ♂ Coll. Parral, Lower California, Mexico. E. Heller.
10. Adult ♀ Coll. Parral, Lower California, Mexico. E. Heller.
11–12. Adult ♀ Coll. Santa Rosa, Lower California, Mexico. E. Heller.
13. Adult ♂ Coll. Santa Eulalia, Lower California, Mexico. E. Heller.
14–15. Adult ♀ Coll. Santa Eulalia, Lower California, Mexico. E. Heller.
16. Adult ♂ Coll. Daggett, California. E. Heller.
17. Adult ♂ Coll. Wild Rose Spring, Panamint Mts., California. E. Heller.
18–19. Adult ♀ Coll. Wild Rose Spring, Panamint Mts., California. E. Heller.
20. Adult ♀ Coll. Oro Grande, California. E. Heller.
21–22. Adult ♂ Coll. Palm Springs, California. E. Heller.
23. Adult ♀ Coll. Lone Pine, California. E. Heller.
24. Adult ♂ Coll. Beveridge Cañon, Inyo Mts., California. E. Heller.
25. Adult ♀ Coll. Beveridge Cañon, Inyo Mts., California. E. Heller.
26. Adult ♂ Coll. Fort Tejon, California. E. Heller.
27. Adult ♀ Coll. Fort Tejon, California. E. Heller.
28. Adult — P. California! Ward's Nat. Scien. Establ., Rochester, N. Y.
29–30. Adult ♂ Coll. Argus Mountains, California. E. Heller. (Alcohol.)
31. Adult ♀ Coll. Argus Mountains, California. E. Heller. (Alcohol.)

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32. Adult ♂ Coll. Lone Pine, Inyo County, California. E. Heller. (Alcohol.)
33–35. Adult ♀ Coll. Lone Pine, Inyo County, California. E. Heller. (Alcohol.)
36–37. Adult ♂ Coll. Keeler, Inyo County, California. E. Heller. (Alcohol.)
38. Adult ♀ Coll. Old Woman's Spring, California. E. Heller. (Alcohol.)
39. Adult ♂ Coll. Old Woman's Spring, California. E. Heller. (Alcohol.)
40. Adult ♀ Coll. Bailey's Ranch, California. E. Heller. (Alcohol.)
41–42. Adult ♂ Coll. Bailey's Ranch, California. E. Heller. (Alcohol.)
43–47. Adult ♂ Coll. Fort Tejon, California. E. Heller. (Alcohol.)
48. Adult ♀ Coll. Fort Tejon, California. E. Heller. (Alcohol.)

a. Pipistrellus hesperus apus Elliot.

Pipistrellus hesperus apus Elliot, Pub. Field Columb. Mus., III, 1904, p. 269. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 583. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 481. Zoöl. Ser.

SWIFT BAT.

1–3. Adult ♂ Type and paratypes. P. Providentia Mines, State of Sonora, Mexico. J. Rowley.
4. Adult ♀ Paratype. P. Providentia Mines, State of Sonora, Mexico. J. Rowley.

896. Pipistrellus subflavus (F. Cuvier).

Vespertilio subflavus F. Cuv., Nouv. Ann. Mus. Hist. Nat. Paris, 1832, p. 17.

Vespertilio erythrodactylus Temm., Mon. Mamm., II, 1835–41, p. 238.

Vesperugo carolinensis H. Allen, Mon. N. Am. Bats, 1894, p. 121. (nec Geoffroy.)

Pipistrellus subflavus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 409. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 481. Zoöl. Ser.

YELLOWISH-BROWN BAT.

1. Adult ♀ Exch. Raleigh, North Carolina. Am. Mus. Nat. Hist. N. Y. H. H. & C. S. Brimley.

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Genus 271. **Vespertilio.**

Vespertilio Linn., Syst. Nat., I, 1758, p. 31; I, 1766, p. 46. Type *Vespertilio murinus* Linnæus. (nec Schreber.)

Eptesicus Rafin., Ann. Nat., I, 1820, p. 2.

Cnephæus Kaup, Skizzirte Entw.-Gesch. u. Natürl. Syst. Europ. Thierw., I, 1829, p. 103.

Noctula Bonap., Iconog. Faun. Ital., I, 1837, fasc. XXI.

Vesperugo Keyserl. & Blas., Wiegm. Archiv f. Naturg., Bd. I, 1839, p. 312. (Part.)

Vesperus Keyserl. & Blas., Wiegm. Archiv f. Naturg., Bd. I, 1839, p. 313.

Cateorus Kolenati, Allgem. Deutsch. Naturh. Zeit. Dresden, neue Folge, II, 1856, pp. 131, 162–163.

Meteorus Kolenati, Allgem. Deutsch. Naturh. Zeit. Dresden, neue Folge, II, 1856, pp. 131, 163–167.

Marsipolæmus Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1872, p. 260.

Adelonycteris H. Allen, Proc. Acad. Nat. Scien. Phil., 1892, p. 466.

Subgenus A. **Vespertilio.**

897. Vespertilio fuscus Beauvois.

Vespertilio fuscus Beauv., Cat. Peale's Mus. Phil., 1796, p. 14. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 410, fig. 87. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 587, figs. 109, LXXXVII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 482. Zoöl. Ser.

Vespertilio carolinensis Geoff., Ann. Mus. Hist. Nat. Paris, VIII, 1806, p. 193.

Vespertilio phaiops Rafin., Am. Month. Mag., III, 1818, p. 445.

Eptesicus melanops Rafin., Ann. Nat., 1820, p. 2.

Vespertilio arquatus Say, Long's Exped. Rocky Mts., I, 1823, p. 167. (note.)

Vespertilio ursinus Temm., Mon. Mamm., II, 1835–41, p. 235.

Scotophilus greenii Gray, List Spec. Mamm. Brit. Mus., I, 1843, p. 30.

BROWN BAT.

1–3. Adult ♂ P. White Mountains, Arizona. W. W. Price.
4. Adult ♀ P. White Mountains, Arizona. W. W. Price.
5–10. Adult ♂ P. Chiricahua Mountains, Arizona. W. W. Price.

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FIG. LXVI. VESPERTILIO FUSCUS. BROWN BAT.

11–20. Adult ♀ P. Chiricahua Mountains, Arizona. W. W. Price.
21. Adult — Pres. Greenway, Arkansas. L. Mitchell.
22–25. Adult ♂ P. Waterloo County, Ontario. G. F. Dippie.
26. Adult ♀ P. Waterloo County, Ontario. G. F. Dippie.
27. Adult ♀ Exch. Hickman County, Kentucky. Am. Mus. Nat. Hist. N. Y. H. H. & C. S. Brimley.
28. Adult ♂ P. Billings, Montana. E. T. Seton.
29. Adult ♂ P. Providentia Mines, State of Sonora, Mexico. J. Rowley.
30–31. Adult ♀ P. Providentia Mines, State of Sonora, Mexico. J. Rowley.
32–36. Adult ♀ Coll. White Sulphur Springs, West Virginia. T. Surber.
37. Adult ♀ Coll. Job Knob Mountain, West Virginia. T. Surber.
38–45. Adult ♂ Coll. Mount Whitney, California. E. Heller.
46–54. Adult ♀ Coll. Mount Whitney, California. E. Heller.
55–60. Adult ♀ Coll. Fort Tejon, California. E. Heller.
61. Adult ♂ Coll. Hot Springs, Panamint Mts., California. E. Heller. (Alcohol.)
62. Adult ♂ Coll. Fort Tejon, California. E. Heller. (Alcohol.)
63–66. Adult ♀ Coll. Fort Tejon, California. E. Heller. (Alcohol.)

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a. Vespertilio fuscus bernardinus (Rhoads).

Eptesicus fuscus bernardinus Rhoads, Proc. Acad. Nat. Scien. Phil., 1901, p. 619.

Vespertilio fuscus bernardinus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 589. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 483. Zoöl. Ser.

SAN BERNARDINO BROWN BAT.

1. Adult ♂ Coll. La Grulla, Lower California, Mexico. E. Heller.

2–3. Adult ♀ Coll. Santa Eulalia, Lower California, Mexico. E. Heller.

4–5. Adult ♂ Coll. Parral, Lower California, Mexico. E. Heller.

6–13. Adult ♀ Coll. Parral, Lower California, Mexico. E. Heller.

b. Vespertilio fuscus miradorensis (H. Allen).

Scotophilus miradorensis H. Allen, Proc. Acad. Nat. Scien. Phil., 1866, p. 287.

Vespertilio fuscus miradorensis Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 588. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 484. Zoöl. Ser.

MIRADOR BROWN BAT.

1. Adult ♂ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

2–3. Adult ♀ Coll. Coyotes, State of Durango, Mexico. Heller & Barber.

c. Vespertilio fuscus peninsulæ Thomas.

Vespertilio fuscus peninsulæ Thos., Ann. Mag. Nat. Hist., 7th Ser., I, 1898, p. 43. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 589. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 484. Zoöl. Ser.

LOWER CALIFORNIA BROWN BAT.

1. Adult ♂ Coll. Parral, San Pedro Martir Mountains, Lower California, Mexico. E. Heller.

d. Vespertilio fuscus propinquus (Peters).

Vesperus propinquus Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1872, p. 262.

Vespertilio fuscus propinquus Elliot, Mamm. Middle Amer. & W.

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Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 589. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 484. Zoöl. Ser.

ALLIED BROWN BAT.

1. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

898. Vespertilio minutus Temminck.

Vespertilio minuta Temm., Monog. Mamm., II, 1835–41, p. 209.

Scotophilus minutus Tomes, Proc. Zoöl. Soc., 1861, p. 33.

LITTLE BAT.

1. Adult ♂ P. Madagascar. C. I. Forsyth-Major.

Genus 272. **Lasiurus.**

Lasiurus Gray, Zoöl. Misc., 1831, No. 1, p. 38. Type *Vespertilio borealis* Müller.

Atalapha Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1870, p. 907. (nec Rafin.)

899. Lasiurus borealis (Müller).

Vespertilio borealis Müll., Natursyst., Suppl., 1776, p. 21.

Vespertilio noveboracensis Erxl., Syst. Reg. Anim., I, 1777, p. 155.

Vespertilio lasiurus Schreb., Säugth., Abth. I, 1781, Taf. LXIIB.

Vespertilio noveboracus Bodd., Elench. Anim., I, 1785, p. 71.

Vespertilio rubellus Beauv., Cat. Peale's Mus. Phil., 1796, p. 204.

Vespertilio rubra Ord, Guthrie's Geogr., 2d Amer. ed., II, 1815, p. 291.

Vespertilio tesselatus Rafin., Am. Month. Mag., III, 1818, p. 445.

Vespertilio monachus Rafin., Am. Month. Mag., III, 1818, p. 445.

Vespertilio rufus Warden, Desc. États-Unis Amér., V, 1820, p. 606.

Lasiurus funebris Fitzing., Sitzungsb. K. Akad. Wiss. Wien, LXII, 1870, p. 46.

Atalapha borealis Rhoads, Amer. Nat., XXVIII, 1894, p. 523.

Lasiurus borealis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 411, fig. 88. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 592. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 485. Zoöl. Ser.

RED BAT.

1–2. Adult ♀ Exch. Raleigh, North Carolina. Am. Mus. Nat. Hist. N. Y. H. H. & C. S. Brimley.

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3. Adult ♂ Exch. Patchogue, Long Island, New York. Am. Mus. Nat. Hist. N. Y. C. A. Smith.
4. Adult ♀ Pres. Jackson Park, Chicago, Illinois. H. Hanton.
5. Adult — Pres. Chicago, Illinois. C. E. Bragdon.
6. Adult — Pres. Maywood, Illinois. E. B. Chope.
7. Adult — Pres. Jackson Park, Chicago, Illinois. A. W. Slocum.
8. Adult ♂ Pres. Jackson Park, Chicago, Illinois. D. Zerberg.
9. Adult — Pres. Chicago, Illinois. Grace Wood.
10. Adult ♀ Pres. Jackson Park, Chicago, Illinois. E. Kuhn.
11. Adult — Pres. F. C. M., Jackson Park, Chicago, Illinois. P. Norris.
12. Adult ♀ Pres. Jackson Park, Chicago, Illinois. L. Kenkel.
13. Adult — Pres. Willow Springs, Illinois. W. J. Gerhard.
14. Adult ♂ Coll. Catawba, South Carolina. T. Surber.
15. Adult ♂ Pres. Greenway, Arkansas. L. Mitchell.
16–19. Adult ♀ Pres. Greenway, Arkansas. L. Mitchell.
20. Adult ♀ P. Chiricahua, Arizona. W. W. Price.
21–22. Juv. — P. Chiricahua, Arizona. W. W. Price.
23. Adult ♂ P. Toronto, Canada. G. F. Dippie.
24. Adult ♂ Pres. Jackson Park, Chicago, Illinois. A. J. Thompson.

a. Lasiurus borealis teliotis (H. Allen).

Atalapha teliotis H. Allen, Proc. Am. Phil. Soc., XXIX, 1891, p. 5.

Lasiurus borealis teliotis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 413. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 593. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 486. Zoöl. Ser.

CALIFORNIA RED BAT.

1. Adult — Pres. Monterey, California. S. E. Meek. Leal & Pearson.

900. Lasiurus cinereus (Beauvois).

Vespertilio cinereus Beauv., Cat. Peale's Mus. Phil., 1796, p. 15.

Vespertilio pruinosus Say, Long's Exped. Rocky Mts., I, 1823, p. 167. (Footnote.)

Lasiurus cinereus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II,

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1901, p. 413. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 595, figs. 110, LXXXVIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 487. Zoöl. Ser.

HOARY BAT.

1. Adult ♂ Pres. Jackson Park, Chicago, Illinois. T. Wark.
2. Adult — Pres. Jackson Park, Chicago, Illinois. E. B. Chope.
3. Adult ♀ Pres. Jackson Park, Chicago, Illinois. H. W. Clark.
4. Adult ♀ Coll. Minot, South Dakota. W. E. Snyder.
5. Adult ♂ Exch. Nicasio, California. Am. Mus. Nat. Hist. N. Y. C. A. Allen.
6. Adult ♂ Coll. San Antonio, Lower California, Mexico. E. Heller.

Genus 273. **Dasypterus.**

Dasypterus Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1871, p. 912. Type *Lasiurus intermedius* H. Allen.

a. Dasypterus ega panamensis Thomas.

Dasypterus ega panamensis Thos., Ann. Mag. Nat. Hist., 7th Ser., VIII, 1901, p. 246. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 597. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 487. Zoöl. Ser.

PANAMA BAT.

1. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

Genus 274. **Nycticeius.**

Nycticeius Rafin., Journ. Phys., LXXXVIII, 1819, p. 417. Type (by elimination) *Vespertilio humeralis* Rafinesque.

Scotophilus Leach, Trans. Linn. Soc. Lond., XIII, Pt. I, 1821, pp. 69, 77-72. (nec Hubner, 1816, Lepid.)

901. Nycticeius humeralis (Rafinesque).

Vespertilio humeralis Rafin., Amer. Month. Mag., III, 1818, p. 445.

Nycticea crepuscularis Le Conte, McMurtrie, Cuv. Anim. Kingd., I, 1831, p. 432.

Nycticejus humeralis Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 415, fig. 90. Zoöl. Ser.

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Nycticeius humeralis Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 598, figs. 112, XC. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 488. Zoöl. Ser.

RAFINESQUE'S BAT.

1. Adult ♀ Exch. Raleigh, North Carolina. Am. Mus. Nat. Hist. N. Y. C. S. Brimley.

902. Nycticeius kuhli (Leach).

Scotophilus kuhlii Leach, Trans. Linn. Soc. Lond., XIII, 1821, p. 72.

Vespertilio temminckii Horsf., Zoöl. Research., 1824.

Vespertilio belangeri I. Geoff., Bélang. Voy. Indes-Orient., 1834, pp. 87, 92, pl. 3.

Vespertilio castaneus Gray, Illust. Ind. Zoölogy, 1830–34.

Nycticejus luteus Blyth, Jour. Asiat. Soc. Beng., XX, p. 157.

Nycticejus flaveolus Blyth, Horsf. Cat. Mamm. Mus. E. I. Co., 1851, p. 37.

COMMON EASTERN YELLOW BAT.

1. Adult ♂ P. Panay, Philippine Islands. Bourns & Worcester.
2–3. Adult ♀ P. Panay, Philippine Islands. Bourns & Worcester.
4. Adult ♂ P. Concepcion, Philippine Islands. Bourns & Worcester.
5. Adult — P. Leyte, Philippine Islands. Bourns & Worcester.
6. Adult ♂ P. Bongon, North Borneo. E. Gerrard & Sons. (Alcohol.)

Genus 275. **Rhogoessa.**

Rhogeëssa! H. Allen, Proc. Acad. Nat. Scien. Phil., 1866, p. 285. Type *Rhogeëssa! tumida* H. Allen.

903. Rhogoessa tumida H. Allen.

Rhogeëssa! tumida H. Allen, Proc. Acad. Nat. Scien. Phil., 1866, p. 286.

Rhogöessa tumida Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 601, figs. 113, XCI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 498. Zoöl. Ser.

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FIG. LXVII. RHOGOESSA TUMIDA. RESTLESS BAT.

RESTLESS BAT.

1. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

Genus 276. **Miniopterus.**

Miniopterus Bonap., Icon. Faun. Ital., I, fasc. XX, 1837; fasc. XXI, pl.—, fig. 1. Type *Vespertilio ursinii* Bonaparte = *Vespertilio schreibersii* Natterer.

Miniopteris Gray, Ann. Mag. Nat. Hist., 3d Ser., XVII, 1866, p. 91.

Minneopterus Lampe, Jahrb. Nassau. ver. Naturkunde, Jahrg. 53, Cat. Säug. Samml., 1900, p. 12.

904. Miniopterus schreibersii (Natterer).

Vespertilio schreibersii Natt., in Kuhl's Deutsche Flederm. Wetter. Ann., IV, 1819, p. 41.

Vespertilio natalensis Smith, S. Afr. Quart. Jour., II, 1834, p. 59.

Vespertilio fuliginosa Hodg., Jour. Asiat. Soc. Beng., IV, 1835, p. 700.

Miniopterus ursinii Bonap., Icon. Faun. Ital., 1837.

Trilatitus blepotis Gray, Ann. Mag. Nat. Hist., X, 1842, p. 258.

Vespertilio eschscholtzii Waterh., Proc. Zoöl. Soc., 1845, p. 4.

LONG-WINGED BAT.

1. Adult — P. Japan. E. Gerrard & Sons.

905. Miniopterus scotinus Sundevall.

Miniopterus scotinus Sundev., Öfvers. Vetensk. Akad. Förh., 1846, p. 119.

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Miniopterus minor Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1866, p. 885.

SUNDEVALL'S LONG-WINGED BAT.

1. Adult ♀ P. Madagascar. C. I. Forsyth-Major.

Subfamily II. **Plecotinæ.**

Genus 277. **Corynorhinus. Big-eared Bats.**

Corynorhinus H. Allen, Proc. Acad. Nat. Scien. Phil., 1865, p. 173. Type *Plecotus macrotis* Le Conte.

Plecotus Le Conte, McMurtrie, Cuv. Anim. Kingd., I, 1831, App., p. 431. (nec Geoffroy, 1813.)

Synotus H. Allen, Mon. N. Am. Bats, 1864, p. 62. (nec Keyserl. & Blasius, 1839.)

a. Corynorhinus macrotis townsendi (Cooper).

Plecotus townsendii Cooper, Ann. N. Y. Lyc. Nat. Hist., IV, 1837, p. 73.

Corynorhinus macrotis townsendi Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 400, fig. 83. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 604. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 491. Zoöl. Ser.

TOWNSEND'S BIG-EARED BAT.

1. Adult ♂ Coll. Goldbeach, Oregon. E. Heller.
2–6. Adult ♀ Coll. Goldbeach, Oregon. E. Heller.

Genus 278. **Plecotus.**

Plecotus Geoff., Desc. Égypte, II, 1813, pp. 112, 118–119, pl. 2, No. 3. Type ———?

906. Plecotus auritus (Linnæus).

Vespertilio auritus Linn., Syst. Nat., I, 1766, p. 47.

Vespertilio otus Boie, Isis, 1825, p. 1206.

Vespertilio cornutus Faber, Isis, 1826, p. 515.

Vespertilio brevimanus Jenyns, Trans. Linn. Soc. Lond., XVI, 1828, p. 55.

Plecotus auritus Geoff., Descrip. Égypte, 1813, p. 118.

Plecotus christii Gray, Mag. Zoöl. & Bot., II, 1838, p. 495.

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LONG-EARED BAT.

1. Adult ♂ P. Brunswick, Germany. J. A. Loring. (Alcohol.)

Subfamily III. **Antrozoinæ.**

Genus 279. **Antrozous.**

Antrozous H. Allen, Proc. Acad. Nat. Scien. Phil., 1862, p. 248. Type *Vespertilio pallidus* Le Conte.

907. Antrozous pallidus (Le Conte).

Vespertilio pallidus Le Conte, Proc. Acad. Nat. Scien. Phil., 1856, p. 437.

Antrozous pallidus Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 396, fig. 82. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 605, figs. 115, XCIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 491. Zoöl. Ser.

BIG-EARED PALE BAT.

1. Adult ♀ Coll. Lone Pine, Inyo County, California. E. Heller.
2. Adult ♀ Coll. Coso Mts., Inyo County, California. E. Heller.
3. Adult ♂ P. White Mountains, Arizona. W. W. Price.

4–8. Adult ♂ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

9–21. Adult ♀ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

a. Antrozous pallidus pacificus Merriam.

Antrozous pallidus pacificus Merr., Proc. Biol. Soc. Wash., XI, 1897, p. 180. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 397. Zoöl. Ser. *Id.* Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 607. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 491. Zoöl. Ser.

PACIFIC BIG-EARED BAT.

1. Adult ♂ Topotype. Coll. Fort Tejon, California. E. Heller.

2–4. Adult ♀ Topotypes. Coll. Fort Tejon, California. E. Heller.

5. Adult ♀ P. San Rafael, California. C. K. Worthern.

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6–10. Adult ♂ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.
11–23. Adult ♀ Coll. Jaral, State of Coahuila, Mexico. Heller & Barber.

Genus 280. **Nyctophilus.**

Nyctophilus Leach, Trans. Linn. Soc. Lond., XIII, Pt. I, 1821, p. 78. Type *Nyctophilus geoffroyi* Leach.

908. Nyctophilus timoriensis E. Geoffroy.
Nyctophilus timoriensis E. Geoff., Ann. Mus. Hist. Nat. Paris, VIII, 1806, p. 200.
AUSTRALIAN BIG-EARED BAT.
1. Adult ♂ P. Australia? E. Gerrard & Sons. (Alcohol.)

Family V. **Noctilionidæ.**

Subfamily I. **Saccopterinæ.**

Genus 281. **Emballonura.**

Emballonura Temm., Van d. Hoev., Tijd. Nat. Gesch. en Physiol., V, 1838, p. 22. Type *Emballonura monticola* ? Temminck.
Mosia Gray, Ann. Mag. Nat. Hist., 1st Ser., XI, 1843, p. 117.

Subgenus A. **Mosia.**

909. Emballonura nigrescens (Gray).
Mosia nigrescens Gray, Zoöl. Voy. 'Sulphur,' Mamm., 1844, p. 23.
BLACKISH SHEATH-TAILED BAT.
1. Adult ♂ P. Moluccas ? E. Gerrard & Sons. (Alcohol.)

Genus 282. **Saccopteryx.**

Saccopteryx Illig., Prodr. Syst. Mamm. et Av., 1811, p. 121. Type *Vespertilio lepturus* Schreber.
Urocryptus Temm., Van d. Hoev., Tijd. Nat. Gesch. en Physiol., V, 1838–39, pp. 31–34, pl. II, figs. 3, 4.
Centronycteris Gray, Mag. Zoöl. & Bot., II, 1838, p. 499.

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910. Saccopteryx bilineata (Temminck).

Urocryptus bilineatus Temm., Van d. Hoev., Tijd. Nat. Gesch. en Physiol., v, 1838, p. 33, figs. 3, 4.

Saccopteryx bilineata Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 610, fig. 117. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 493. Zoöl. Ser.

WHITE-STRIPED BAT.

1–2. Adult ♂ Coll. San Geronimo, State of Oaxaca, Mexico. Heller & Barber.

3–5. Adult ♀ Coll. San Geronimo, State of Oaxaca, Mexico. Heller & Barber.

6–18. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber. (Alcohol.)

19–49. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber. (Alcohol.)

Genus 283. **Balantiopteryx.**

Balantiopteryx Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1867, p. 476. Type *Balantiopteryx plicata* Peters.

911. Balantiopteryx plicata Peters.

Balantiopteryx plicata Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1867, p. 476. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 611, figs. 118, XCV. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 493. Zoöl. Ser.

POUCHED BAT.

1. Adult — Coll. Puente de Ixtla, State of Morelos, Mexico. F. E. Lutz.

2. Adult ♂ P. Lower California, Mexico. J. F. Abbott.

3. Adult ♂ Coll. San Geronimo, State of Oaxaca, Mexico. Heller & Barber.

4–7. Adult ♀ Coll. San Geronimo, State of Oaxaca, Mexico. Heller & Barber.

8–28. Adult ♂ Coll. San Geronimo, State of Oaxaca, Mexico. Heller & Barber. (Alcohol.)

29–55. Adult ♀ Coll. San Geronimo, State of Oaxaca, Mexico. Heller & Barber. (Alcohol.)

56–59. Adult — Coll. San Geronimo, State of Oaxaca, Mexico. Heller & Barber. (Alcohol.)

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Genus 284. **Taphozous.**

Taphozous Geoff., Desc. Égypte, II, 1813, pp. 113–114, 126–128, pl. 3, No. 1. Type *Taphozous perforatus* Geoffroy.
Taphonycteris Dobs., Proc. Zoöl. Soc., 1875, pp. 548, 555–556.

Subgenus A. **Taphonycteris.**

912. Taphozous affinis Dobson.
Taphozous affinis Dobson, Ann. Mag. Nat. Hist., 4th Ser., XVI, 1875, p. 232.
ALLIED SHEATH-TAILED BAT.
1. Adult ♂ P. ———? E. Gerrard & Son. (Alcohol.)

Family VI. **Molossidæ.**

Subfamily I. **Molossinæ.**

Genus 285. **Cheiromeles.**

Cheiromeles Horsf., Zoöl. Research. Java, 1824, figs. A–G, I–M, O–P. Type *Cheiromeles torquatus* Horsfield.

913. Cheiromeles torquatus Horsfield.
Cheiromeles torquatus Horsf., Zoöl. Research. Java, 1824.
Dysopes cheiropus Temm., Mon. Mamm., I, 1827, p. 218, pl. XVII.
Cheiromeles caudatus Temm., Mon. Mamm., II, 1835–41, p. 348, pl. XLVI.
SCANTILY HAIRED BAT.
1. Adult — P. Borneo. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 286. **Molossus.**

Molossus E. Geoff., Ann. Mus. Hist. Nat. Paris, VI, 1805, p. 151. Type *Molossus rufus* E. Geoffroy.
Dysopes Illig., Prodr. Syst. Mamm. et Av., 1811, p. 122.

a. Molossus rufus obscurus (E. Geoffroy).
Molossus obscurus E. Geoff., Ann. Mus. Hist. Nat. Paris, VI, 1805, p. 155.

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FIG. LXVIII. MOLOSSUS RUFUS. RUFOUS MASTIFF BAT.

Molossus longicaudatus E. Geoff., Ann. Mus. Hist. Nat. Paris, VI, 1805, p. 155.
Molossus acuticaudatus Desm., Mamm., 1820, p. 116.
Dysopes velox Temm., Mon. Mamm., I, 1827, p. 234.
Molossus fuliginosus Gray, Mag. Zoöl. & Bot., II, 1838, p. 501.
Dysopes olivaceo-fuscus Wagn., Abh. Akad. Münch., V, 1844, p. 202.
Dysopes fumarius Burm., Syst. Uebers. Thiere Bras., I, 1854, p. 71.
Molossus aztecus Sauss., Rev. Mag. Zool., 2me Sér., XII, 1860, p. 285.
Molossus rufus obscurus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 620. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 495. Zoöl. Ser.

DUSKY MASTIFF BAT.

1. Adult ♂ P. Court House, Tobago, British West Indies. P. Rendell.

914. Molossus nigricans Miller.

Molossus nigricans Miller, Proc. Acad. Nat. Scien. Phil., 1902, p. 395. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 620. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 496. Zoöl. Ser.

BLACKISH MASTIFF BAT.

1–6. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
7–15. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

915. Molossus pretiosus Miller.

Molossus pretiosus Miller, Proc. Acad. Nat. Scien. Phil., 1902, p. 396.

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EXTRAVAGANT BAT.

1. Adult ♀ Exch. Venezuela. U. S. Nat. Mus. Lyon & Robinson.

Genus 287. **Nyctinomops.**

Nyctinomops Miller, Proc. Acad. Nat. Scien. Phil., 1902, p. 393. Type *Nyctinomus femorosaccus* Merriam.

916. Nyctinomops femorosaccus (Merriam).

Nyctinomus femorosaccus Merr., N. Am. Faun., No. 2, 1889, p. 23. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 417. Zoöl. Ser.

Nyctinomops femorosaccus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 626. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 498. Zoöl. Ser.

PALM SPRINGS FREE-TAILED BAT.

1. Adult ♀ Topotype. Coll. Palm Springs, California. E. Heller. (Alcohol.)

Genus 288. **Nyctinomus.**

Nyctinomus E. Geoff., Desc. Égypte, Mamm., II, 1813, pp. 114, 128–130, pl. 2, No. 2. Type *Nyctinomus ægyptiacus* E. Geoffroy.

Dinops Savi, Nouv. Giorn. de Lett., 1825, p. 230.

Dysopes Cretzsch., Rüpp. Atl. Reis. Nordl. Afr., Zoöl., 1826, p. 69. (nec Illig.)

917. Nyctinomus mexicanus Saussure.

Nyctinomus mexicanus Sauss., Rev. Mag. Zool., 2me Sér., XII, 1860, p. 283. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 629, fig. 125. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 500. Zoöl. Ser.

Nyctinomus mohavensis Merr., N. Am. Faun., No. 2, 1889, p. 25. Elliot, Syn. N. Am. Mamm., F. C. M. Pub., II, 1901, p. 418. Zoöl. Ser.

Nyctinomus brasiliensis californicus H. Allen, Mon. N. Am. Bats, 1894, p. 166.

Nyctinomus brasiliensis Elliot, Syn. N. Am. Mamm , F. C. M. Pub., II, 1901, p. 417. Zoöl. Ser. (nec Geoffroy.)

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MEXICAN FREE-TAILED BAT.

1–7. Adult ♂ Coll. Enterprise, Florida. T. Surber.
8–17. Adult ♀ Coll. Enterprise, Florida. T. Surber.
18–26. Adult — Coll. Enterprise, Florida. T. Surber.
27. Adult ♂ Exch. Enterprise, Florida. Am. Mus. Nat. Hist. N. Y. L. W. Brownell.
28. Adult ♂ Exch. San Antonio, Texas. Am. Mus. Nat. Hist. N. Y. H. P. Attwater.
29. Adult ♂ Exch. Guadalajara, Mexico. Am. Mus. Nat. Hist. N. Y. A. Buller.
30. Adult ♀ Exch. Guadalajara, Mexico. Am. Mus. Nat. Hist. N. Y. A. Buller.
31–36. Adult ♂ Coll. La Palma, State of Michoacan, Mexico. F. E. Lutz.
37–50. Adult ♀ Coll. La Palma, State of Michoacan, Mexico. F. E. Lutz.
51–55. Adult ♂ Coll. La Palma, State of Michoacan, Mexico. F. E. Lutz. (Alcohol.)
56–86. Adult ♀ Coll. La Palma, State of Michoacan, Mexico. F. E. Lutz. (Alcohol.)
87–88. Adult ♂ Coll. Fort Tejon, California. E. Heller.
89–94. Adult ♀ Coll. Fort Tejon, California. E. Heller.
95. Adult ♀ Coll. Palm Springs, California. E. Heller.
96–97. Adult ♀ P. ———? E. Gerrard & Sons. (Alcohol.)
98. Adult ♂ Coll. San José, California. S. E. Meek. (Alcohol.)
99. Adult ♂ Coll. Ensenada, Lower California, Mexico E. Heller. (Alcohol.)
100–106. Adult ♂ Coll. Mexico. Heller & Barber. (Alcohol.)
107–108. Adult ♀ Coll. Mexico. Heller & Barber. (Alcohol.)

918. Nyctinomus antillularum Miller.

Nyctinomus antillularum Miller, Proc. Acad. Nat. Scien. Phil., 1902, p. 398.

DOMINICAN FREE-TAILED BAT.

1. Adult ♀ Paratype. Exch. Island of Dominica. U. S. Nat. Mus. H. S. Branch.

919. Nyctinomus acetabulosus (Peters).

Molossus acetabulosus Peters, Monatsb. K. Preuss. Akad. Wiss. Berlin, 1869, p. 402.

Nyctinomus acetabulosus Desm., Mamm., 1820, p. 117.

Nyctinomus natalensis Smith, Illustr. S. Afr. Zoöl., 1847, pl. 49.

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Nyctinomus (*Mormopterus*) *jugularis* Peters, Proc. Zoöl. Soc., 1865, p. 468.

MADAGASCAR FREE-TAILED BAT.

1. Adult ♀ P. Madagascar. C. I. Forsyth-Major.

Family VII. **Thyropteridæ. Funnel-eared Bats.**

Genus 289. **Chilonatalis.**

Chilonatalus (sic) Miller, Proc. Acad. Nat. Scien. Phil., 1898, p. 326. Type *Natalus! micropus* Dobson.

920. Chilonatalis brevimanus Miller.

Natalus! micropus Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1890, p. 169. (nec Dobson.)

Natalus! (*Chilonatalus!*) *brevimanus* Miller, Proc. Acad. Nat. Scien. Phil., 1898, p. 328.

Chilonatalis brevimanus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II. 1904, p. 636, figs. 128, CIII. Zoöl. Ser *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 502. Zoöl. Ser.

SHORT-HAND BAT.

1. Adult ♂ No history. (Alcohol.)

Family VIII. **Phyllostomatidæ. Vampire Bats.**

Subfamily I. **Mormopinæ.**

Genus 290. **Chilonycteris.**

Chilonycteris Gray, Ann. Nat. Hist., or Mag. Zoöl. Bot. Geol., IV, 1839, p. 4. Type *Chilonycteris macleayii* Gray.

Lobostoma Gundl., Wiegm. Archiv f. Naturg., I, 1840, p. 356.

Phyllodia Gray, Proc. Zoöl. Soc., 1843, p. 50.

921. Chilonycteris personata Wagner.

Chilonycteris personata Wagn., Archiv f. Naturg., IX, 1843, p. 367. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 641. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 504. Zoöl. Ser.

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MASKED BAT.

1. Adult — P. Guatemala. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 291. *Pteronotus.

Pteronotus Gray, Mag. Zoöl. & Bot., II, 1838, p. 500. Type *Pteronotus davyi* Gray. (nec Rafinesque, nomen nudum.)

Dermonotus Gill, Proc. Biol. Soc. Wash., XIV, 1901, p. 177.

922. Pteronotus davyi Gray.

Pteronotus davyi Gray, Mag. Zoöl. & Bot., II, 1838, p. 500.

Dermonotus davyi Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 644, figs. 131, CVI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 506. Zoöl. Ser.

DAVY'S BAT.

1. Adult — Exch. State of Michoacan, Mexico. Am. Mus. Nat. Hist. N. Y. A. Buller.

a. Pteronotus davyi fulvus (Thomas).

Chilonycteris davyi fulvus Thos., Ann. Mag. Nat. Hist., 6th Ser., X, 1892, p. 410.

Dermonotus davyi fulvus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 646. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 506. Zoöl. Ser.

LAS PEÑAS BAT.

1. Adult ♂ Coll. Esperanza, State of Puebla, Mexico. Heller & Barbei.

Genus 292. Mormops.

Mormoops (sic) Leach, Trans. Linn. Soc., XIII, 1820, p. 76. Type *Mormoops! blainvillii* Leach.

a. Mormops blainvillii cinnamomea (Gundlach).

Lobostoma cinnamomeum Gundl., Wiegm. Archiv f. Naturg., VI, 1840, p. 357.

Mormops blainvillii cinnamomea Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 649. Zoöl. Ser.

* See Miller, Proc. Biol. Soc. Wash., XVIII, 1905, p. 223.

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Id. Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 507. Zoöl. Ser.

CINNAMON BAT.

1. Adult ♂ P. Aquacate, San Domingo. G. K. Cherrie.

923. Mormops intermedia Miller.

Mormoops! intermedia Miller, Proc. Acad. Nat. Scien. Phil., 1902, p. 403.

INTERMEDIATE BAT.

1. Adult ♂ Exch. Curaçao, Venezuela. U. S. Nat. Mus. L. J. Guthrie.

Subfamily II. **Phyllostomatinæ.**

Genus 293. **Otopterus.**

Otopterus Lydekker, in Flow. & Lydekk. Mamm. Living & Extinct, 1891, p. 673. Type *Macrotus waterhousii* Gray.

Macrotus Gray, Proc. Zoöl. Soc., 1843, p. 21. (nec Leach, 1816, Vespertil; nec Dejean, 1833, Coleopt; nec Reid, 1836, Marsupialia.)

924. Otopterus waterhousii (Gray).

Macrotus waterhousii Gray, Proc. Zoöl. Soc., 1843, p. 21.

Otopterus waterhousii Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 652, figs. 134, CIX. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 508. Zoöl. Ser.

WATERHOUSE'S LARGE-EARED BAT.

1–2. Adult ♂ P. San Domingo City, Haiti. G. K. Cherrie.

3. Adult ♂ P. "Guadjara." E. Gerrard & Sons. (Alcohol.)

FIG. LXIX OTOPTERUS WATERHOUSII. WATERHOUSE'S LARGE-EARED BAT.

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925. Otopterus mexicanus (Saussure).

Macrotus mexicanus Sauss., Rev. Mag. Zool., 2me Sér., XII, 1860, p. 486.

Otopterus mexicanus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 653. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 510. Zoöl. Ser.

SAUSSURE'S LARGE-EARED BAT.

1. Adult ♂ Exch. Tehuantepec, Mexico. Am. Mus. Nat. Hist. N. Y. A. Buller.

926. Otopterus bocourtianus (Dobson).

Macrotus bocourtianus Dobson, Ann. Mag. Nat. Hist., 4th Ser., 1876, p. 436.

Macrotus mexicanus J. A. Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 179.

Otopterus bocourtianus Elliot, Mamm. Middle Amer. & W. Indies. F. C. M. Pub., IV, Pt. II, 1904, p. 654. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 510. Zoöl. Ser.

BOCOURT'S LARGE-EARED BAT.

1. Adu t — Pres. Yucatan.

927. Otopterus bulleri (H. Allen).

Macrotus bulleri H. Allen, Proc. Am. Phil. Soc., XXVIII, 1890, p. 73.

Otopterus bulleri Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 654. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 510. Zoöl. Ser.

BULLER'S LARGE-EARED BAT.

1–2. Adult ♂ Topotypes. Exch. Bolaños, State of Jalisco, Mexico. Am. Mus. Nat. Hist. N. Y. A. Buller.

Genus 294. **Vampyrus.**

Vampyrus Leach, Trans. Linn. Soc., XIII, 1821, p. 79. Type *Vespertilio spectrum* Linnæus.

928. Vampyrus auritus Peters.

Vampyrus auritus Peters, Abhandl. Akad. Wiss. Berl., 1856, p. 305, pl. II, fig. 1.

Chrotopterus auritus Peters, Monatsb. K. Preuss. Akad. Wiss. Berlin, 1865, p. 505.

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GREAT-EARED BAT.

1. Adult ♂ Pres. Buenavista, Yucatan. G. F. Gaumer.

Genus 295. **Micronycteris.**

Micronycteris Gray, Proc. Zoöl. Soc., 1866, p. 113. Type *Phyllophora megalotis* Gray.

Schizostoma Gerv., Expéd. du Comt. de Castelnau Amér. Sud, Zool., 1855, p. 49. (nec Bronn, 1835, Mollusca.)

Vampyrella Reinh., Vidensk. Meddel. Naturh. Foren. Kjöbenh., 3 Aartis, IV, 1872, p. 111.

929. Micronycteris megalotis (Gray).

Phyllophora megalotis Gray, Ann. Mag. Nat. Hist., 1st Ser., x, 1842, p. 257.

Phyllostoma elongata Gray, Ann. Mag. Nat. Hist., 1st Ser., x, 1842, p. 257. (nec Geoffroy.)

Phyllostoma scrobiculatum Wagn., Schreb. Säugth., Suppl., v, 1855, p. 627.

Micronycteris megalotis Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 662, figs. 138, CXII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 513. Zoöl. Ser.

LARGE-EARED VAMPIRE BAT.

1. Adult ♂ P. Richmond, Island of Tobago, Brit. W. I. P. Rendall.

a. Micronycteris megalotis mexicana Miller.

Micronycteris megalotis mexicanus Miller, Proc. Acad. Nat. Scien. Phil., 1898, p. 329. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 662. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. &. W. Indies, F. C. M. Pub., VI, 1905, p. 513. Zoöl. Ser.

MEXICAN VAMPIRE BAT.

1–3. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

4–6. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

7. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber. (Alcohol.)

8–9. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber. (Alcohol.)

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Genus 296. **Phyllostoma.**

Phyllostomus (sic) Lacép., Tabl. Div. Sous-div. Ordres et Genres des Mamm., 1799, p. 16. Type *Vespertilio hastatus* Pallas.

930. Phyllostoma verrucosum Elliot.

Phyllostoma verrucosum Elliot, Proc. Biol. Soc. Wash., XVIII, 1905, p. 236.

WARTY-LIPPED BAT.

1–3. Adult ♀ Type and paratypes. Coll. Niltepec, State of Oaxaca, Mexico. Heller & Barber.

4–9. Adult ♂ Paratypes. Coll. Niltepec, State of Oaxaca, Mexico. Heller & Barber.

10–36. Adult ♂ Paratypes. Coll. Niltepec, State of Oaxaca, Mexico. Heller & Barber. (Alcohol.)

37–41. Adult ♀ Paratypes. Coll. Niltepec, State of Oaxaca, Mexico. Heller & Barber. (Alcohol.)

931. Phyllostoma hastatum (Pallas).

Vespertilio hastatus Pallas, Spicil. Zool., fasc. III, 1767, p. 7.
Phyllostomus! maximus Max., Reise Bras., II, 1820-21, p. 242.
Phyllostoma hastatum Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 666, figs. 140, CXIV. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 514. Zoöl. Ser.

SPEAR-NOSED BAT.

1–2. Adult ♂ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

3. Adult ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

4. Adult—P. Peru. Ward's Nat. Scien. Establ., Rochester, N. Y.

FIG. LXX. PHYLLOSTOMA HASTATUM.
SPEAR-NOSED BAT.

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Genus 297. **Hemiderma.**

Hemiderma Gerv., Expéd. du Comt. de Castelnau Amér. Sud, Zool., Mamm., 1855, p. 43. Type *Phyllostoma brevicaudum* Maximilian.

Carollia Gray, Mag. Zoöl. & Bot., II, 1838, p. 488. (nec Cantraine, 1837, Mollusca.)

932. Hemiderma subrufum Hahn.

Hemiderma subrufum Hahn, Proc. Biol. Soc. Wash., XVIII, 1905, p. 247.

REDDISH BROWN SHORT-TAILED BAT.

1–3. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber. (Alcohol.)
4–24. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber. (Alcohol.)
25–27. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
28–30. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
31–32. Adult ♂ Coll. San Geronimo, State of Oaxaca, Mexico. Heller & Barber.
33. Adult ♀ Pres. Cayenne, French Guiana. Benj. T. Gault. Cherrie & Gault.
34–39. Adult ♂ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.
40–47. Adult ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.
48. Adult ♀ P. Caparo Valley, Trinidad. P. Rendall.
49. Adult — P. Venezuela. Deyrolle Fils.

Subfamily III. **Glossophaginæ.**

Genus 298. **Glossophaga.**

Glossophaga E. Geoff., Mém. Mus. Hist. Nat. Paris, IV, 1818, pp. 413, 418, pls. 17, 18. Type *Vespertilio soricinus* Pallas.

Phyllophora Gray, Mag. Zoöl. & Bot., II, 1838, p. 489.

Nicon Gray, Proc. Zoöl. Soc., 1847, p. 15.

933. Glossophaga mutica Merriam.

Glossophaga mutica Merr., Proc. Biol. Soc. Wash., XII, 1898, p. 18. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV,

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Pt. II, 1904, p. 671. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 516. Zoöl. Ser.

MARIA MADRE ISLAND BAT.

1–3. Adult ♂ Coll. San Geronimo, State of Oaxaca, Mexico. Heller & Barber.

4–5. Adult ♀ Coll. San Geronimo, State of Oaxaca, Mexico. Heller & Barber.

6–8. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

9–12. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

13–33. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber. (Alcohol.)

34. Juv. ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber. (Alcohol.)

35–91. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber. (Alcohol.)

92–95. Adult ♂ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

96–101. Adult ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

102–104. Adult — P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

934. Glossophaga longirostris Miller.

Glossophaga longirostris Miller, Proc. Acad. Nat. Scien. Phil., 1898, p. 330.

LONG-NOSED BAT.

1. Adult ♀ Exch. Macuto, Venezuela. U. S. Nat. Mus. Lyon & Robinson. (Alcohol.)

935. Glossophaga elongata Miller.

Glossophaga elongata Miller, Proc. Biol. Soc. Wash., 1900, p. 124.

NARROW-SKULL BAT.

1. Adult ♀ Exch. Savonet, Curaçoa, Venezuela. U. S. Nat. Mus. L. J. Guthrie. (Alcohol.)

936. Glossophaga soricina (Pallas).

Vespertilio soricinus Pall., Misc. Zool., 1766, p. 48, pl. IV, figs. 16–18, pl. V.

Glossophaga amplexicaudata E. Geoff., Mém. Mus. Hist. Nat. Paris, IV, 1818, p. 418, pl. XVIII.

Phyllophora nigra Gray, Voy. 'Sulphur,' Mamm., 1844, p. 18, pl. V, fig. 1.

Monophylla leachii Gray, Voy. 'Sulphur,' Mamm., 1844, p. 18.

Nicon caudifer Gray, Ann. Mag. Nat. Hist., 1st Ser., XIX, 1847, p. 407.

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Glossophaga soricina Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 672, figs. 142, CXVI. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 516. Zoöl. Ser.

SHREW-LIKE BAT.

1–2. Adult — No history.
3. Adult — P. No history. E. Gerrard & Sons. (Alcohol.)
4. Adult — P. Central America. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 299. **Chœronycteris.**

Choeronycteris Licht., in Tschudi's Faun. Peruana, Mamm., 1844, p. 70, Taf. III. Type *Choeronycteris mexicana* Tschudi.

937. Chœronycteris mexicana Tschudi.

Choeronycteris mexicana Tsch., Faun. Peruana, 1844, p. 72, Taf. III, fig. 3. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 673, fig. CXVII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 517. Zoöl. Ser.

FIG. LXXI. CHŒRONYCTERIS MEXICANA.
TRES MARIAS ISLANDS BAT.

TRES MARIAS ISLANDS BAT.

1. Adult — P. ———————— ? E. Gerrard & Sons. (Alcohol.)
2. Adult — Coll. Patzcuaro, State of Michoacan, Mexico. F. E. Lutz. (Alcohol.)

Genus 300. **Monophyllus.**

Monophyllus Leach, Trans. Linn. Soc., XIII, 1821, p. 75. Type *Monophyllus redmani* Leach.

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938. Monophyllus cubanus Miller.

Monophyllus cubanus Miller, Proc. Acad. Nat. Scien. Phil., 1902, p. 410. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 678. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 519. Zoöl. Ser.

CUBAN NOSE-LEAF BAT.

1. Adult ♂ Exch. Baracoa, Island of Cuba. U. S. Nat. Mus. W. Palmer. (Alcohol.)

Genus 301. **Phyllonycteris.**

Phyllonycteris Gundl., Monatsb. K. Preuss. Akad. Wiss. Berl., 1860, p. 817. Type *Phyllonycteris poeyi* Gundlach.

939. Phyllonycteris sancta-cristobalensis Elliot.

Phyllonycteris sancta-cristobalensis Elliot, Proc. Biol. Soc. Wash., XVIII, 1905, p. 236. (Misprinted *santa-cristobalensis*.)

SAN DOMINGO BAT.

1. Adult — Type. Coll. San Cristobal, San Domingo, W. I. G. K. Cherrie.

940. Phyllonycteris planifrons Miller.

Phyllonycteris planifrons Miller, Proc. Biol. Soc. Wash., XII, 1899, p. 34. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 685. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 520. Zoöl. Ser.

FLAT-FOREHEAD BAHAMA BAT.

1. Adult ♀ Exch. Nassau, Bahama Islands. U. S. Nat. Mus. J. E. Benedict. (Alcohol.)

941. Phyllonycteris poeyi Gundlach.

Phyllonycteris poeyi Gundl., Monatsb. K. Preuss. Akad. Wiss. Berlin, 1860, p. 817. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 686. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 521. Zoöl. Ser.

POEY'S BAT.

1. Adult ♀ Exch. Guanajay, Island of Cuba. U. S. Nat. Mus. Palmer & Riley. (Alcohol.)

Genus 302. **Brachyphylla.**

Brachyphylla Gray, Proc. Zoöl. Soc., 1834, p. 122. Type *Brachyphylla cavernarum* Gray.

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942. Brachyphylla cavernarum Gray.

Brachyphylla cavernarum Gray, Proc. Zoöl. Soc., 1834, p. 123. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 689, fig. 149. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 521. Zoöl. Ser.

CAVERN NOSE-LEAF BAT.

1. Adult ♂ Exch. Island of St. Vincent, W. I. U. S. Nat. Mus.
2. Adult ♀ Exch. Island of St. Lucia, W. I. U. S. Nat. Mus.

943. Brachyphylla nana Miller.

Brachyphylla nana Miller, Proc. Acad. Nat. Scien. Phil., 1902, p. 409. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 690, figs. 150, CXXIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI 1905, p. 522. Zoöl. Ser.

FIG. LXXII. BRACHYPHYLLA NANA.
DWARF NOSE-LEAF BAT.

DWARF NOSE-LEAF BAT.

1–5. Adult ♂ P. Santiago, Cuba. S. H. Hamilton.
6–11. Adult ♀ P. Santiago, Cuba. S. H. Hamilton.
12–15. Adult — P. Santiago, Cuba. S. H. Hamilton. (Alcohol.)

Subfamily IV. **Stenodermatinæ.**

Genus 303. **Artibeus.**

Artibeus Leach, Trans. Linn. Soc., XIII, 1821, p. 75. Type *Artibeus jamaicensis* Leach.

Madatæus Leach, Trans. Linn. Soc., XIII, 1821, p. 81.

Pteroderma Gerv., Expéd. du Comte de Castelnau Amér. Sud, Zool., 1855, p. 34.

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944. Artibeus jamaicensis Leach.

Artibeus jamaicensis Leach, Trans. Linn. Soc., XIII, 1821, p. 75. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 693, figs. 151, CXXIV. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 522. Zoöl. Ser.

Artibeus carpolegus Gosse, Nat. Sojourn in Jamaica, 1851, p. 271, pl. VI, fig. 5.

FIG. LXXIII. ARTIBEUS JAMAICENSIS. JAMAICA BAT.

JAMAICA BAT.

1. Adult ♂ P. San Cristobal, San Domingo. G. K. Cherrie.
2–4. Adult ♂ P. Santiago, Cuba. S. H. Hamilton.
5–7. Adult ♀ P. Santiago, Cuba. S. H. Hamilton.

945. Artibeus intermedius J. A. Allen.

Artibeus carpolegus J. A. Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1891, p. 205. (nec Gosse.)

Artibeus intermedius J. A. Allen, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 33. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 694. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 523. Zoöl. Ser.

INTERMEDIATE BAT.

1. Adult — Coll. San Domingo City, San Domingo. G. K. Cherrie.

946. Artibeus palmarum Allen & Chapman.

Artibeus palmarum Allen & Chapman, Bull. Am. Mus. Nat. Hist. N. Y., 1897, p. 16.

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Artibeus femurvillosum Bangs, Proc. N. Engl. Zoöl. Club, 1, 1899, p. 73.

TRINIDAD BAT.

1. Adult ♂ Exch. Macuto, Venezuela. U. S. Nat. Mus. Lyon & Robinson. (Alcohol.)

Genus 304. **Uroderma.**

Uroderma Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1865, p. 588. (Footnote.) Type *Uroderma bilobatum* Peters = *Phyllostoma personatum* Peters.

947. Uroderma bilobatum Peters.

Phyllostoma personatum Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1865, pp. 587, 588. (nec Wagner.)

Uroderma bilobatum Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1866, p. 392.

TWO-LOBED BAT.

1–2. Adult ♂ P. Cacaqualito, Colombia, S. A. H. H. Smith.
3. Adult ♀ P. Cacaqualito, Colombia, S. A. H. H. Smith.
4–5. Adult ♂ P. Bonda, Colombia, S. A. H. H. Smith.
6. Adult ♀ P. Bonda, Colombia, S. A. H. H. Smith.

948. Uroderma validum sp. nov.

VALID BAT.

Type locality. Cayenne, French Guiana, South America.

Genl. Char. Size large; similar in appearnace to *Artibeus hercules* Rehn, but with a larger skull and teeth, shorter palate and entirely differently shaped condyle and coronoid process, the latter having no "forward trend" like that of the species cited. The type of *A. hercules* having been immersed for a lengthened period in alcohol, the color of the two forms cannot be compared.

Color. A white streak from either side of the nose-leaf extends to the inside base of each ear; circle around eye, front and top of head and entire upper parts dark seal brown; beneath paler brown, with white hairs intermingled on lower breast and abdomen; nose-leaf and lips, membranes, feet and ears black.

Measurements. Head and body, 88; foot, 17; ear, 22, (taken in the flesh by collector) forearm, 67; tibia, 25. Skull: occipito-nasal length, 27; Hensel, 13; zygomatic width, 19.5; interorbital width, 8; height of braincase above zygomata, 12; palatal length, palatal arch to base of incisors, 12; width of palate between third pre-

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FIG. LXXIV. URODERMA VALIDUM. VALID BAT.
Enlarged 1½ times. Nose view enlarged 2½ times.

molar and first molar, 8; length of upper molar series, 9; inside length of first upper molar, 4.5; width of crown, 3; inside length of second molar, 4; length of mandible, 21; length of lower molar series, 11; alveolar length of first molar, 3; alveolar length of second molar, 2.5; height from lower border of ramus to top of coronoid process, 9.5; width of condyle at level of alveolar border of ramus, 7.

The skull of *A. hercules* Rehn has been kindly sent to meby Mr. Stone from the Phil. Acad. Collection. The differences in the size of the teeth, so much larger in the two specimens of the new form, the shape of the condyle, and the cranial characters mentioned, are very conspicuous, and seem to mark the Guiana specimens as quite distinct.

1–2. Adult ♂ Type & paratype. Pres. Cayenne, French Guiana, S. A. B. T. Gault. Cherrie & Gault.

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Genus 305. **Dermanura.**

Dermanura Gervais, Expéd. Comte de Castelnau Amér. Sud, Zool., Mamm., 1855, p. 36. Type *Dermanura cinereum* Gervais.

949. Dermanura cinereum Gervais.

Dermanura cinereum Gerv., Expéd. Comte de Castelnau Amér. Sud, Zoöl., Mamm., 1855, p. 36, pl. VIII, fig. 4; pl. IX, figs. 4, 4a; pl. XI, fig. 3. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 699, figs. 154, CXXVII (*D. 4-vittata.*). Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 525. Zoöl. Ser.

Stenoderma tolteca Sauss., Rev. Mag. Zool., 2me Sér., XII, 1860, p. 427, pl. XV, fig. 4.

CINEREOUS BAT.

1. Adult — P. ——————? E. Gerrard & Sons. (Alcohol.)

950. Dermanura jucundum Elliot.

Dermanura jucundum Elliot, Proc. Biol. Soc. Wash., XIX, 1906, p. 50.

PRETTY STRIPED BAT.

1. Adult ♂ Type. Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

Genus 306. **Vampyrops.**

Vampyrops Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1865, p. 356. Type *Phyllostoma lineatum* E. Geoffroy.

Vampyressa Thos., Ann. Mag. Nat. Hist., 7th Ser., V, 1900, p. 270.

Vampyriscus Thos., Ann. Mag. Nat. Hist., 7th Ser., V, 1900, p. 270.

Vampyrodes Thos., Ann. Mag. Nat. Hist., 7th Ser., V, 1900, p. 270.

951. Vampyrops lineatus (E. Geoffroy).

Phyllostoma lineatum E. Geoff., Ann. Mus. Hist. Nat. Paris, XV, 1810, p. 180.

Vampyrops lineatus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 702. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 525. Zoöl. Ser.

WHITE-STRIPED BAT.

1. Adult — P. Annai. E. Gerrard & Sons.

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Subfamily V. **Desmodontinæ.**

Genus 307. **Desmodon.**

Desmodus (sic) Max., Abbild. Naturg. Bras., 5th Lief., 1824, pl. and text. Type *Desmodus! rufus* Maximilian = *Phyllostoma rotundum* E. Geoffroy.

952. Desmodon rotundum (E. Geoffroy).

Phyllostoma rotundum E. Geoff., Ann. Mus. Hist. Nat. Paris, 1810, p. 181.

Rhinolophus ecaudatus Schinz, Cuv. Thiere., I, 1821, p. 168.

Desmodus! rufus Max., Beitr. Naturg. Bras., 1826, p. 233.

Edostoma cinerea D'Orbigny, Voy. l'Amér. Mérid., IV, 1847, p. 11, pl. VIII.

Desmodus! d'orbignyi Waterh., Voy. 'Beagle,' Mamm., 1838, p. 1, pls. 5, XXXV, fig. 1.

Desmodus! murinus Wagn., Schreb. Säugth., Suppl., I, 1847, p. 377.

Desmodus! fuscus Lund, Burm. Thiere. Bras., 1854, p. 57.

Desmodus! rotundus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 718, figs. 162, CXXXVI. Zoöl. Ser.

Desmodon rotundum Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 530. Zoöl. Ser.

FIG. LXXV. DESMODON ROTUNDUM.
RUFOUS VAMPIRE BAT.

RUFOUS VAMPIRE BAT.

1. Adult — P. Venezuela, S. A. Deyrolle Fils.
2. Adult — P. ——— ? E. Gerrard & Sons.
3. Adult ♂ Coll. Reforma, State of Oaxaco, Mexico. Heller & Barber.

4–14. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

15–16. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

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Order XI. **Primates. Primates.**

SUBORDER I. LEMUROIDEA.

Family I. **Lemuridæ. Lemurs.**

Subfamily I. **Indrisinæ.**

Genus 308. **Indris.**

Indri (sic) E. Geoff., Mag. Encyclop., 1, 1796, p. 46. Type *Lemur indri* Gmelin.

Pithelemur Less., Spec. Mamm., 1840, pp. 207–209.

953. Indris indris (Gmelin).

Lemur indri Gmel., Syst. Nat., 1, 1788, p. 42.

Indri! brevicaudata E. Geoff., Mag. Encyclop., 1796, p. 46.

Lichanotus mitratus Peters, Monatsb. K. Preuss. Akad. Wiss. Berl., 1871, p. 360.

Indris brevicaudatus Milne-Edw. & Grandid., Hist. Nat. Madag., Mamm., 1875, p. 336, pls. XI, XII.

BLACK INDRIS. *Batokoton*, native name.

1. Adult — P. Madagascar. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 309. **Propithecus.**

Propithecus Bennett, Proc. Zoöl. Soc., 1832, p. 20. Type *Propithecus diadema* Bennett.

Macromerus A. Smith, S. Afr. Quart. Jour., 2d Ser., II, 1833, p. 49. (nec Schönherr, 1826, Coleop.)

Habrocebus Wagn., Schreb. Säugth., Suppl., 1, 1840, pp. IX, vbis, 257, tab. XLII A.

954. Propithecus diadema Bennett.

Propithecus diadema Bennett, Proc. Zoöl. Soc., 1832, p. 20. Milne-Edw. & Grandid., Hist. Nat. Madag., 1, 1875, p. 296, pls. I-III.

Macromerus typicus A. Smith, S. Afr. Quart. Jour., 1833, p. 49.

Habrocebus diadema Wagn., Schreb. Säugth., Suppl., 1, 1840, p. 260.

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THE PROPITHEQUE.

1. Adult — P. Madagascar. Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Propithecus diadema holomelas (Günther).

Propithecus holomelas Günth., Ann. Mag. Nat. Hist., 4th Ser., XVI, 1875, p. 125.

GÜNTHER'S PROPITHEQUE.

1. Adult — P. Madagascar. E. Gerrard & Sons.

955. Propithecus verreauxi Grandidier.

Propithecus verreauxi Grandid., Rev. Mag. Zool., 1867, pp. 84, 313. *Id.* Album Réunion, IV, 1867, p. 152, pls. 1-2. Milne-Edw. & Grandid., Hist. Nat. Madag., Mamm., I, 1875, p. 305, pls. IV, VIII.

VERREAUX'S PROPITHEQUE.

1–2. Adult — P. Aneronpange District, Madagascar. E.Gerrard & Sons.

♂. Juv. — P. Aneronpange District, Madagascar. E. Gerrard & Sons.

a. Propithecus verreauxi deckeni (Peters).

Propithecus deckeni Peters, Monatsb. K. Preuss. Akad. Wiss. Berlin, 1870, p. 421.

Propithecus candidus Grandid., Compt. Rend., 1871, p. 231.

VON DECKEN'S PROPITHEQUE.

1. Adult — P. Manambolo River District, Madagascar. E. Gerrard & Sons.

b. Propithecus verreauxi coquereli (Grandidier).

Cheirogaleus coquereli Grandid., Rev. Mag. Zool., 1867, p. 2.

Propithecus damonis Gray, Proc. Zoöl. Soc., 1872, p. 847, No. 3.

Propithecus damanus Pollen, in Schleg., Mus. Hist. Nat. Pays-Bas, XII, 1876, p. 293.

COQUEREL'S PROPITHEQUE.

1. Adult — P. Aneronpange District, Madagascar. E. Gerrard & Sons.

c. Propithecus verreauxi coronatus A. Milne-Edwards.

Propithecus verreauxi var. *coronatus* A. Milne-Edw., Rev. Scient., 1871, p. 224.

CROWNED PROPITHEQUE.

1. Adult — P. Meyanga, N. W. Madagascar. E. Gerrard & Sons.

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Genus 310. *Lichanotus.

Lichanotus Illig., Prodr. Syst. Mamm. et Avium, 1811, p. 72. Type *Lemur laniger* Gmelin.

Avahi! Jourd., L'Instit., II, 1834, p. 231.

Microrhynchus Jourd., Thèse inaug. Facul. Scien. Grenoble, 1834. (nec Megerle, 1823, Coleop.)

956. Lichanotus laniger (Gmelin).

Lemur laniger Gmel., Syst. Nat., I, 1788, p. 44.

Indris longicaudatus Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 158.

Microrhynchus laniger Jourd., Thèse inaug. Facul. Scien. Grenoble, 1834. Mivart, Proc. Zoöl. Soc., 1864, p. 638.

Indris laniger A. Smith, S. Afr. Quart. Jour., II, 1835, p. 27.

Habrocebus lanatus Wagn., Schreb. Säugth., Suppl., I, 1840, p. 258.

Avahis laniger I. Geoff., Leçons Mamm. & Cat. Primates, 1851, p. 69.

WOOLLY LEMUR, AVAHIS.

1. Adult ♂ P. Madagascar. C. I. Forsyth-Major.

Subfamily II. Lemurinæ. Lemurs.

Genus 311. Lemur.

Lemur Linn., Syst. Nat., I, 1758, p. 29; I, 1766, p. 44. Type *Lemur catta* Linnæus.

957. Lemur varius I. Geoffroy.

Lemur macaco Schreb., Säugth., I, 1775, p. 142, pl. XL B. (nec Linn.)

Lemur varius I. Geoff., Leçons Mamm. & Cat. Primates, 1851, p. 71.

Varecia varia Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 70.

**Indri!* E. Geoffroy, 1796, & *Lichanotus* Illiger, 1811, contained the same species, *indris* and *laniger*, but which however were not co-generic. *Indris* was taken as the type of Geoffroy's genus *Indri!* thus leaving only *laniger* for Illiger's genus *Lichanotus*, and therefore its type, the genus antedating *Avahi* Jourdan, usually employed for *laniger*, by 23 years. Also, from another point of view, following the principle that the first specimen cited by an author after a new genus, becomes its type, the same result is attained, *indris* called *brevicauda* becomes the type of *Indri!* and *laniger* of *Lichanotus*, reducing *Avahi* to the rank of a synónym.

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RUFFED LEMUR.

1. Adult — P. Madagascar. Ward's Nat. Scien. Establ., Rochester, N. Y.

2–3. Adult — P. Madagascar. E. Gerrard & Sons.

958. Lemur mongos Linnæus.

Lemur mongos Linn., Syst. Nat., I, 1766, p. 44.

Lemur albimanus E. Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 160.

Lemur collaris E. Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 161.

Lemur anjuanensis Peters, Reise nach Mossamb., Zool., I, 1852, p. 21.

Lemur nigrifrons Milne-Edw. & Grandid., Hist. Nat. Madag., Mamm., Atlas, II, 1890, pls. CXXXV, XLIII.

MUNGOOSE LEMUR.

1. Adult — P. Madagascar. E. Gerrard & Sons.

a. Lemur mongos albifrons (E. Geoffroy).

Lemur albifrons E. Geoff., Ann. Mus. Hist. Nat. Paris, 1812, p. 160.

Prosimia albifrons Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 73.

WHITE-FRONTED LEMUR.

1. Adult — P. Madagascar. E. Gerrard & Sons.

b. Lemur mongos rufifrons (Bennett).

Lemur rufifrons Bennett, Proc. Zoöl. Soc., 1833, p. 106.

Prosimia rufifrons Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 74.

Lemur mongos var. *rufifrons* Milne-Edw. & Grandid., Hist. Nat. Madag., Mamm., Atlas, II, 1890, pls. CXXXVIII, CXXXIX, CXLIV.

RED-FRONTED LEMUR.

1–4. Adult — P. S. W. Madagascar. E. Gerrard & Sons.

959. Lemur melanocephala (Gray).

Prosimia melanocephala Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 73.

BLACK-HEADED LEMUR.

1–3. Adult — P. Madagascar. E. Gerrard & Sons.

960. Lemur rubriventer I. Geoffroy.

Lemur rubriventer I. Geoff., Compt. Rend., XXXI, 1850, p. 876.

Lemur flaviventer I. Geoff., Compt. Rend., XXXI, 1850, p. 876.

Prosimia rufipes J. E. Gray, Ann. Mag. Nat. Hist., 4th Ser., VII, 1871, p. 339.

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RED-BELLIED LEMUR.

1. Adult — P. Madagascar. E. Gerrard & Sons.
2. Adult ♂ P. Madagascar. C. I. Forsyth-Major.

FIG. LXXVI. LEMUR CATTA. RING-TAILED LEMUR.

961. Lemur catta Linnæus.

Lemur catta Linn., Syst. Nat., I, 1758, p. 30; I, 1766, p. 45. Milne-Edw. & Grandid., Hist. Nat. Madag., Mamm., Atlas, II, 1890, pls. CLXVII-CLXXII.

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RING-TAILED LEMUR.

1. Adult — P. Madagascar. Ward's Nat. Scien. Establ., Rochester, N. Y.

FIG. LXXVII. HAPALOLEMUR GRISEUS. GRAY LEMUR.

Genus 312. **Hapalolemur.**

Hapalemur (sic) I. Geoff., L'Institut, 19me Ann., No. 929, 1851, p. 341, footnote. Type "*le Maki griset des auteurs*" = *Lemur griseus* E. Geoffroy.

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Lepilemur! I. Geoff., L'Institut, 19me Ann., No. 929, 1851, p. 341, footnote.

Prolemur Gray, Proc. Zoöl. Soc., 1870, p. 828, pl. LII, figs. 1-4.

962. Hapalolemur griseus (E. Geoffroy).

Lemur griseus E. Geoff., Mag. Encyclop., I, 1796, p. 46.

Cheirogaleus griseus Van d. Hoev., Tijd. Nat. Gesch. en Physiol., 1844, p. 38, pl. 1, fig. 1.

Hapalemur! griseus I. Geoff., Leçons Mamm. & Cat. Primates, 1851, p. 74. Milne-Edw. & Grandid., Hist. Nat. Madag., Mamm., Atlas, II, 1890, pl. CXXII D, fig. 2.

Hapalolemur griseus Sclat., Proc. Zoöl. Soc., 1863, p. 161.

Hapalemur! simus Gray, Proc. Zoöl. Soc., 1870, p. 828, pl. 52.

GRAY LEMUR.

1. Juv. — P. Madagascar. C. I. Forsyth-Major.
2. Adult — P. Madagascar. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 313. **Lepidolemur.**

Lepilemur (sic) I. Geoff., Cat. Méth. Mamm. Mus. Hist. Nat. Paris, 1e part., 1851, p. 75. Type *Lepilemur! mustelinus* I. Geoffroy.

Lepidolemur Peters, Monatsb. K. Preuss. Akad. Wiss. Berlin, 1874, p. 690.

963. Lepidolemur mustelinus I. Geoffroy.

Lepilemur! mustelinus I. Geoff., Leçons Mamm. & Cat. Primates, 1851, p. 76.

Lepilemur! dorsalis Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 135.

WEASEL LEMUR.

1. Adult ♀ P. Madagascar. C. I. Forsyth-Major.

964. Lepidolemur microdon Forsyth-Major.

Lepidolemur microdon F.-Major, in Forbes, Handb. Primates I, 1894, p. 88.

SMALL-TOOTHED LEMUR.

1. Adult ♂ P. Madagascar. C. I. Forsyth-Major.

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Subfamily III. **Galaginæ.**

Genus 314. **Chirogaleus.**

Cheirogaleus! E. Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 172, pl. 10. Type *Cheirogaleus! major* Geoffroy.

Myspithecus F. Cuv., "Hist. Nat. Mamm., éd. 4, 1833."

965. Chirogaleus melanotis Forsyth-Major.

Chirogale melanotis F.-Major, Novit. Zool., I, 1894, p. 25, pl. II, fig. 10.

Cheirogaleus! typicus Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, pp. 78, 133. *Id.* Proc. Zoöl. Soc., 1872, p. 855, pl. LXXI.

BLACK-EARED LEMUR.

1. Juv. ♂ P. Madagascar. C. I. Forsyth-Major.

Genus 315. **Microcebus.**

Microcebus E. Geoff., Cours Hist. Nat. Mamm., 11me Leçon, 1834, p. 24. Type *Lemur pusillus* E. Geoffroy.

Mirza Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 131.

Phaner Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 132.

Azema Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 134.

Murilemur Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 135.

966. Microcebus murinus (Miller).

Lemur murinus Miller, Var Subj. Nat. Hist., 1777, pl. XIII.

Microcebus murinus Waterh. Cat. Mus. Zoöl. Soc., 1838, p. 12, No. 90.

Cheirogaleus! smithii Gray, Ann. Mag. Nat. Hist., 1st Ser., X, 1842, p. 257.

Galago minor Gray, Ann. Mag. Nat. Hist., 1st Ser., X, 1842, p. 257.

Lepilemur! murinus Gray, Proc. Zoöl. Soc., 1863, p. 143.

Murilemur murinus Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 135.

MURINE MOUSE-LEMUR.

1. Adult ♀ P. Madagascar. C. I. Forsyth-Major.

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Genus 316. **Galago.**

Galago E. Geoff., Mag. Encyclop., 2me Ann., I, 1796, p. 49, pl. I. Type *Galago senegalensis* Geoffroy = *Lemur galago* Schreber.

Otolicnus Illig., Prodr. Syst. Mamm. et Av., 1811, p. 74.

Galagoides A. Smith, S. Afr. Quart. Journ., 2d Ser., II, 1833, No. 1, p. 32.

Hemigalago Dahlbom, Zool. Stud., I, Tredje Häftet, 1857, p. 224, Tab. X.

Otolemur Coquerel, Rev. Mag. Zool., 2me Sér., XI, 1859, p. 458, pls. 17, 18, fig. 1.

Otogale Gray, Proc. Zoöl. Soc., 1863, p. 139, figs. 1-2.

Callotus Gray, Proc. Zoöl. Soc., 1863, p. 145.

Subgenus A. **Otolemur.**

967. Galago galago (Schreber).

Lemur galago Schreb., Säugth., I, 1775, pl. 38 B.

Galago senegalensis E. Geoff., Mag. Encyclop., I, 1796, p. 49.

Galagoides senegalensis A. Smith, S. Afr. Quart. Jour., II, 1833, p. 32.

GALAGO.

1. Adult — P. South Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

Subgenus B. **Galagoides.**

968. Galago demidoffi Fischer.

Galago demidoffii Fisch., Act. Soc. Nat. Mosc., I, 1806, p. 24, fig 1, juv.

DEMIDOFF'S GALAGO.

1. Adult — P. Batuga, Cameroons, West Africa. C. W. McCleary.

Subfamily IV. **Nycticebinæ.**

Genus 317. **Nycticebus.**

Nycticebus E. Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 163. Type *Nycticebus bengalensis* E. Geoffroy = *Tardigradus coucang* Boddaert.

? *Bradicebus* Cuv. & Geoff., Mag. Encyclop., No. VI, 1795. (nec descript.)

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969. Nycticebus coucang (Boddaert).

Tardigradus coucang Bodd., Elench. Anim., I, 1783, p. 67.

Nycticebus bengalensis E. Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 164.

Nycticebus cinereus A. Milne-Edw., Nouv. Arch. Mus. Bull., III, 1867, p. 11.

FIG. LXXVIII. NYCTICEBUS COUCANG. SLOW LORIS.

SLOW LORIS.

1. Adult — P. Borneo. Ward's Nat. Scien. Establ., Rochester, N. Y.
2. Adult ♀ P. Borneo. Menage Scient. Exped. Bourns & Worcester.

Family II. **Tarsiidæ.**

Genue 318. **Tarsius.**

Tarsius Storr, Prodr. Meth. Mamm., 1780, p. 33, Tab. A. Type *Lemur tarsius* Erxleben.

Macrotarsus Link, Beytr. Naturg., I, Pt. II, 1795, pp. 51, 65–66.

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Rabienus Gray, Lond. Med. Repos., xv, No. 88, 1821, p. 299.
Cephalopachus Swains., Nat. Hist. & Class. Quad., 1835, p. 352.
Hypsicebus Less., Spec. Mamm., 1840, pp. 207, 253–254.

970. Tarsius tarsius (Erxleben).

Lemur tarsius Erxl., Syst. Reg. Anim., 1777, p. 71.
Lemur spectrum Pall., Nov. Spec. Quad. Glir. Ord., 1778, p. 275, (note).
Macrotarsus buffoni Link, Beytr. Naturg., I, Pt. II, 1795, p. 61.

WOOLLY TARSIER.

1. Adult — P. Borneo. Ward's Nat. Scien. Establ., Rochester, N. Y.

FIG. LXXIX. TARSIUS TARSIUS. WOOLLY TARSIER.

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Family III. **Daubentoniidæ.**

Genus 319. **Daubentonia.**

Daubentonia E. Geoff., Décad. Philos. et Litt., 1795, p. 195.
Type *Sciurus madagascariensis* Gmelin.
Cheiromys (sic) G. Cuv., Leçons Anat. Comp., I, 1800.

FIG. LXXX. DAUBENTONIA MADAGASCARIENSIS. AYE-AYE.

971. Daubentonia madagascariensis (Gmelin).
Sciurus madagascariensis Gmel., Syst. Nat., I, 1788, p. 152, No. 29.
Daubentonia madagascariensis E. Geoff., Décad. Philos. et Litt., IV, 1795, p. 195.
Cheiromys! madagascariensis Geoff., Cat. Mamm. Mus. Hist. Nat. Paris, 1803, p. 181.

AYE-AYE.

1. Adult — P. Madagascar. Ward's Nat. Scien. Establ., Rochester, N. Y.

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SUBORDER II. ANTHROPOIDEA.

Family IV. **Callitrichidæ. Marmosets.**

Genus 320. **Callithrix.**

Callithrix Erxl., Syst. Regn. Anim., 1777, p. 55. Type *Simia jacchus* Linnæus.

Sagoinus Kerr, Anim. Kingd., Mamm., I, 1792, p. 80.

Sagouin! Lacépèd., Tabl. Mamm., 1799, p. 4.

Hapale Illig., Prodr. Syst. Mamm. et Av., 1811, p. 71.

Jacchus E. Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 118.

972. Callithrix jacchus (Linnæus).

Simia jacchus Linn., Syst. Nat., I, 1758, p. 27; I, 1766, p. 40.

Jacchus penicillatus E. Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 119.

Jacchus vulgaris Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 63.

BLACK-EARED MARMOSET.

1–6. Group — P. S. E. Brazil. Ward's Nat. Scien. Establ., Rochester, N. Y.

973. Callithrix leucopus (Günther).

Hapale leucopus Günth., Proc. Zoöl. Soc., 1876, p. 743, pl. LXXII.

WHITE-FOOTED MARMOSET.

1. Adult — P. Meddellen, Colombia. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 321. **Œdipomidas.**

Œdipomidas Reichenb., Vollst. Naturg. Affen, 1862, p. 5, pl. II, figs. 18–20. Type *Simia œdipus* Linnæus.

Midas Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 120. (nec Latreille, 1796, Diptera.)

Œdipus Less., Spec. Mamm., 1840, pp. 184, 197–200. (nec Tschudi, 1838, Amphib.)

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974. Œdipomidas illigeri (Pucheran).

Midas illigeri Pucher., Rev. Mag. Zool., 1845, p. 336. Gray, Cat. Monkeys, Lemurs and Fruit-eating Bats Brit. Mus., 1870, p. 67.

Midas devillei Sclat., Proc. Zoöl. Soc., 1871, p. 220, pl. XIII. (nec Geoff.)

ILLIGER'S MARMOSET.

1. Adult — P. Ecuador. Ward's Nat. Scien. Establ., Rochester, N. Y.

Family V. **Cebidæ. Prehensile-tailed Monkeys.**

Subfamily I. **Alouattinæ.**

Genus 322. **Alouatta. Howling Monkeys.**

Alouatta Lacépède, Tabl. Div. Sous-div. Ordres et Genres Mamm., 1799, p. 4. Type *Simia belzebul* Linnæus.

Mycetes Illig., Prodr. Syst. Mamm. et Av., 1811, p. 70.

975. Alouatta ursina (Humboldt & Bonpland).

Simia ursina Humb. & Bonp., Obs. Zool., I, 1811, pl. XXX.

Stentor fuscus E. Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 108.

Mycetes seniculus Wagn., Schreb. Säugth., Suppl., I, 1840, p. 179.

Mycetes bicolor Gray, Ann. Mag. Nat. Hist., XVI, 1845, p. 214.

THE ARAQUATO.

1–5. Adult — P. La Plata. Ward's Nat. Scien. Establ., Rochester, N. Y. Mounted group.

976. Alouatta seniculus (Linnæus).

Simia senicula Linn., Syst. Nat., I, 1766, p. 37.

Simia ursina Humb. & Bonp., Obs. Zool., I, 1811, p. 354, desc. (nec pl.)

Mycetes stramineus Spix, Sim. et Vespert. Bras., 1823, p. 45, pl. 31.

Mycetes chrysurus Geoff., Mém. Mus. Hist. Nat. Paris, XVII, 1829, p. 66.

Mycetes auratus Gray, Ann. Mag. Nat. Hist., XVI, 1845, p. 219.

Mycetes laniger Gray, Ann. Mag. Nat. Hist., XVI, 1845, p. 220.

RED HOWLER.

1–3. Adult — P. Bonda, Colombia, South America. H. H. Smith.

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977. Alouatta palliata (Gray).

Mycetes palliatus Gray, Proc. Zoöl. Soc., 1848, p. 138, pl. VI.

Alouatta palliata Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 726, fig. CXXXVIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 533. Zoöl. Ser.

FIG. LXXXI. ALOUATTA PALLIATA. MANTLED HOWLER.

MANTLED HOWLER.

1. Adult ♂ P. Boquete, Chiriqui, Costa Rica. J. H. Batty.
2–6. Adult ♀ P. Boquete, Chiriqui, Costa Rica. J. H. Batty.
7. Adult ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

a. Alouatta palliata mexicana Merriam.

Alouatta palliata mexicana Merr., Proc. Biol. Soc. Wash., XV, 1902, p. 67. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 727. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 533. Zoöl. Ser.

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MEXICAN HOWLER.

1. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

2–5. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

6. Juv. ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

b. Alouatta palliata coibensis Thomas.

Alouatta palliata coibensis Thos., Novitat. Zool., IX, 1902, p. 135. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 727. Zoöl. Ser. *Id.* Check-L. Mamm.N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 533. Zoöl. Ser.

COIBA ISLAND HOWLER.

1. Adult ♀ Topotype. P. Coiba Island, Panama. J. H. Batty.

Subfamily II. **Pitheciinæ.**

Genus 323. **Pithecia.**

Pithecia Desm., Nouv. Dict. Hist. Nat., XXIV, 1804, p. 8. Type *Simia pithecia* Linnæus.

Chiropotes Less., Spec. Mamm., 1840, p. 178.

978. Pithecia pithecia (Linnæus).

Simia pithecia Linn., Syst. Nat., I, 1766, p. 40.

Simia leucocephala Audeb., Hist. Nat. Singes, Fam. VI, Sect. I, 1797, p. 9, fig. 2.

Pithecia leucocephala Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 117.

Pithecia capillamentosa Spix, Sim. et Vespert. Bras., 1823, p. 16, pl. XI.

Pithecia nocturna Schleg., Mus. Pays-B., XII, 1876, p. 217. (Part.)

BLACK YARKEE.

1. Adult—P. Guiana. Ward's Nat. Scien. Establ., Rochester, N. Y.

Subfamily III. **Aotinæ. Squirrel Monkeys.**

Genus 324. **Callicebus.**

Callicebus Thos., Ann. Mag. Nat. Hist., 7th Ser., XII, 1903, p. 457. Type *Callithrix personatus* Geoffroy.

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FIG. LXXXII. PITHECIA PITHECIA. BLACK YARKEE.

Callithrix E. Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 112. (nec Erxleben, 1777.)

979. Callicebus cuprea (Spix).

Callithrix cuprea Spix, Sim. et Vespert. Bras., 1823, p. 23, pl. XVII.

Callithrix discolor I. Geoff., Compt. Rend. Acad. Scien., XXVII, 1848, p. 498.

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COPPER-COLORED MONKEY.

1. Adult — P. Brazil. Ward's Nat. Scien. Establ., Rochester, N. Y.

FIG. LXXXIII. SAIMIRI ŒRSTEDI. ŒRSTED'S TITI MONKEY.

Genus 325. **Saimiri.**

Saimiri Voigt, Cuvier's Thierreich, I, 1831, p. 95. Type *Simia sciurea* Linnæus.

Chrysothrix Kaup, Das Thierr., I, 1835, p. 50, fig.
Pithesciurus Less., Spec. Mamm., 1840, pp. 116, 157–160.
Saimiris Geoff., Compt. Rend. Paris, XVI, 1843, p. 1151.

980. Saimiri sciurea (Linnæus).

Simia sciurea Linn., Syst. Nat., I, 1758, p. 19; I, 1766, p. 43.
Saimiri sciureus I. Geoff., Leçon Mamm., 1835, p. 19.
Chrysothrix sciurea Kaup, Das Thierr., I, 1835, p. 50.

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TEETEE.

1. Adult — P. Brazil. Ward's Nat. Scien. Establ., Rochester, N. Y.

981. Saimiri œrstedi (Reinhardt).

Chrysothrix sciurea Sclat., Nat. Hist. Rev., 1861, p. 510. (nec Linn.)

Chrysothrix œrstedii Reinh., Vidensk. Medd. Nat. For. K öbenh., 1872, p. 157, pl. III.

Saimiris entomophaga Sclat., Proc. Zoöl. Soc., 1872, p. 3. (nec d'Orbigny.)

Saimiri œrstedi Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 731, figs. 166, CXL. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 534. Zoöl. Ser.

ŒRSTED'S TITI MONKEY.

1–4. Adult ♂ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

5–6. Adult ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

Subfamily IV. **Cebinæ.**

Genus 326. **Ateles. Spider Monkeys.**

Ateles E. Geoff., Ann. Mus. Hist. Nat. Paris, VII, 1806, p. 262. Type *Simia paniscus* Linnæus.

Atelocheirus E. Geoff., Ann. Mus. Hist. Nat. Paris, VII, 1806, p. 272

Paniscus Rafin., Analyse de la Nature, 1815, p. 53. (nec Schrank, 1802, Hymenopt.)

982. Ateles vellerosus Gray.

Ateles vellerosus Gray, Proc. Zoöl. Soc., 1865, p. 733. Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 733, fig. CXLI, pl. LXVIII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 534. Zoöl. Ser.

Ateles fuliginosus Schleg., Mus. Pays-Bas, III, 1876, p. 179. (nec Kuhl.)

Ateles pan Schleg., Mus. Pays-Bas, III, 1876, p. 180.

MEXICAN SPIDER MONKEY.

1. Adult — P. ————? Ward's Nat. Scien. Establ., Rochester, N. Y.

2–5. Adult ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

6. Juv. ♂ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

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FIG. LXXXIV. ATELES VELLEROSUS. MEXICAN SPIDER MONKEY.

7. Adult ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.
8. Juv. ♀ Coll. Achotal, State of Vera Cruz, Mexico. Heller & Barber.

Genus 327. **Cebus.**

Cebus Erxl., Syst. Regn. Anim., Mamm., 1777, pp. 44–54. Type *Simia capucina* Linnæus.

Calyptrocebus Reichenb., Vollst. Naturg. Affen, 1862, p. 55, pls. VI-VII, figs.

Pseudocebus Reichenb., Vollst. Naturg. Affen, 1862, p. 55, pls. VI–VII, figs. 83, 84, 89, 90, 108.

Otocebus Reichenb., Vollst. Naturg. Affen, 1862, p. 55, pls. VII–VIII, figs.

983. Cebus flavus E. Geoffroy.

Cebus flavus E. Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 112.

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Cebus pallidus Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 49, No. 3.

PALE CAPUCHIN.

1–3. Adult ♂ P. Caicara, Venezuela. G. K. Cherrie.
4. Juv. ♂ P. Caicara, Venezuela. G. K. Cherrie.
5. Adult ♀ P. Caicara, Venezuela. G. K. Cherrie.
6. Adult ♀ P. Alta Gracia, Rio Oronoco, Venezuela. G. K. Cherrie.

984. Cebus capucinus (Linnæus).

Simia capucina Linn., Syst. Nat., I, 1758, p. 19; I, 1766, p. 42.
Cebus nigrivittatus Wagn., Abhandl. Akad. München, v, 1848, p. 420.
Cebus olivaceus Schomb., Reis. Brit. Guiana, II, 1848, p. 246.
Cebus castaneus I. Geoff., Cat. Prim., 1851, p. 46.
Cebus versicolor Puch., Rev. Mag. Zool., 1857, p. 346.
Cebus annallatus Gray, Proc. Zoöl. Soc., 1865, p. 827, fig. 3.

CAPUCHIN.

1–3. Adult — P. Bonda, Colombia, South America. H. H. Smith.
4. Adult ♂ Exch. Central Park Menagerie. Am. Mus. Nat. Hist. N. Y.

FIG. LXXXV. CEBUS HYPOLEUCUS. WHITE-THROATED CAPUCHIN.

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985. Cebus hypoleucus (Humboldt).

Simia hypoleuca Humb., Recueil Obs. Zool. Anat. Comp., I, 1811, p. 337.

Cebus hypoleucus Elliot, Mamm. Middle Amer. & W. Indies, F. C. M. Pub., IV, Pt. II, 1904, p. 736, figs. 167, CXLII. Zoöl. Ser. *Id.* Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 536. Zoöl. Ser.

WHITE-THROATED CAPUCHIN. *Mono carablanca.*

1. Adult ♂ Exch. Central Park Menagerie. Am. Mus. Nat. Hist. N. Y.
2. Adult — Exch. Central Park Menagerie. Am. Mus. Nat. Hist. N. Y.
3–4. Adult ♂ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.
5–8. Adult ♀ P. Boqueron, Chiriqui, Costa Rica. J. H. Batty.

Family VI. **Cercopithecidæ.**

Subfamily I. **Cercopithecinæ.**

Genus 328. **Papio.**

Papio Erxl., Syst. Regn. Anim., 1777, p. 15. Type *Papio sphinx* Erxleben.

Cynocephalus Cuv. & Geoff., Mag. Encyclop., III, 1795, p. 462. (nec Boddaert, 1768, Insectiv.)

Mandril Voigt, Cuvier's Thierreich, I, 1831, p. 88.

Mormon Wagn., Schreb. Säugth., Suppl., I, 1839, p. 164.

Hamadryas Less., Spec. Mamm., 1840, p. 107. (nec Hübner, 1806, Coleop.)

Choiropithecus Reich., Vollst. Naturg. Affen, 1862, p. 151.

Chæropithecus Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, pp. 5, 35.

986. Papio sphinx (Linnæus).

Simia sphinx Linn., Syst. Nat., I, 1758, p. 25; I, 1766, p. 35.

Cynocephalus papio Desm., Mamm., 1820, p. 69.

Cynocephalus choras Ogilby, Proc. Zoöl. Soc., 1843, p. 12.

Papio rubescens Temm., Esquis. Zool., 1853, p. 39.

Cynocephalus sphinx Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 35.

THE PAPION.

1. Adult — P. West Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

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987. Papio maimon (Linnæus).

Simia maimon Linn., Syst. Nat., I, 1766, p. 35.

Papio mormon E. Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 104, No. 7.

Mormon maimon Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 36.

FIG. LXXXVI. PAPIO MAIMON. MANDRILL.

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MANDRILL.

1. Adult ♂ P. West Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

988. Papio leucophæus (F. Cuvier).

Cynocephalus leucophæus F. Cuv., Ann. Mus. Hist. Nat. Paris, IX, 1807, p. 477, tab. 37.

Chæropithecus leucophæus Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 35.

FIG. LXXXVII. PAPIO LEUCOPHÆUS. THE DRILL.

THE DRILL.

1. Adult — Pres. West Africa. C. P. Galetti.

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989. Papio hamadryas (Linnæus).

Simia hamadryas Linn., Syst. Nat., 1, 1758, p. 27; 1, 1766, p. 36.
Cynocephalus wagleri Agass., Isis, 1828, p. 861.
Cynocephalus hamadryas F. Cuv., Hist. Nat. Mamm., 2e Ed., 1833, p. 129, pl. 46.
Hamadryas choeropithecus Less., Spec. Mamm., 1840, pp. 107–111.
Hamadryas ægyptiaca Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 34.

FIG. LXXXVIII. PAPIO HAMADRYAS. THE TARTARIN.

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THE TARTARIN.

1. Adult ♂ Coll. Sheik Pass, Golis Range, Somaliland, East Africa. D. G. Elliot.

990. Papio porcarius (Brünnich).

Simia porcaria Brunn., Dyr. Hist. Univ. Nat.-Theat., 1782, p. 13. Bodd., Naturf., XXII, 1787, p. 17, figs. 1, 2.

Simia sphingiola Herm., Obs. Zool., I, 1804, p. 2.

Cynocephalus porcarius F. Cuv., Hist. Nat. Mamm., 2e Ed., 1833, p. 132, pl. 47.

THE CHACMA.

1. Adult — P. S. Africa. Ward's Nat. Scien. Establ., Rochester, N. Y.

991. Papio doguera (Pucheran & Schimper).

Cynocephalus babouin Rüpp., Neue Wirbelth., I, 1835–40, p. 7. (Part.)

Cynocephalus doguera Puch. & Schimp., Rev. & Mag. Zool., 1856, p. 96; 1857, p. 57.

Cynocephalus porcarius Fitzing. & Heugl., Syst. Uebers, 1866, p. 6.

ABYSSINIAN CHACMA.

1. Adult ♂ P. Managasha, Abyssinia. P. H. G. Powell-Cotton.

Genus 329. **Theropithecus.**

Theropithecus I. Geoff., Archiv. Mus. Hist. Nat. Paris, II, 1843, p. 576. Type *Macacus gelada* Rüppell.

Gelada Gray, List Spec. Mamm. Brit. Mus., 1843, pp. XVII, 9.

992. Theropithecus obscurus Heuglin.

Theropithecus obscurus Heugl., Nov. Act. Acad. Cæs. Leop.-Carol., 1863, p. 30.

DARK GELADA.

1. Adult ♂ P. Managasha, Abyssinia. P. H. G. Powell-Cotton.

Genus 330. **Macacus.**

Macaca (sic) Lacépèd., Tabl. Mamm., 1799, p. 4. Type *Simia inuus!* Linnæus.

Inuus! Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 100.

Magus Less., Man. Mamm., 1827, p. 43.

Nemestrinus Reichenb., Vollst. Naturg. Affen, 1862, p. 139, pl. XXIV, figs. 349–353, 359–363. (nec Latreille, 1802, Diptera.)

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993. Macacus lasiotis Gray.

Macacus lasiotis Gray, Proc. Zoöl. Soc., 1868, p. 61, pl. VI.

HAIRY-EARED MACACQUE.

1. Adult — P. Szechuen, China. Ward's Nat. Scien. Establ., Rochester, N. Y.

994. Macacus fascicularis (Raffles).

Simia cynomolgus Schreb., Säugth., I, 1775, p. 91, pl. XIII. (nec Linn.)

Simia fascicularis Raffles, Trans. Linn. Soc., XIII, 1821, p. 246.

Macacus aureus I. Geoff., Voy. Bélang., Zool., 1834, p. 58.

Macacus philippinensis I. Geoff., Cat. Primates, 1851, p. 29.

Inuus! palpebrosus Wagn., Schreb. Säugth., Suppl., V., 1855, p. 54.

Macacus fur Slack, Proc. Acad. Nat. Scien. Phil., 1867, p. 36, pl.

Macacus cristatus Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 30.

Macacus assamensis Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 31.

THE KRA.

1. Adult — P. Panay, Philippines. Menage Scientific Exped. Bourns & Worcester.

995. Macacus nemestrinus (Linnæus).

Simia nemestrinus Linn., Syst. Nat., I, 1766, p. 35.

Inuus! nemestrinus E. Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 101.

Simia carpolegos Raffles, Trans. Linn. Soc., XIII, 1821, p. 243.

Macacus nemestrinus F. Cuv., Hist. Nat. Mamm., 2e Ed., 1833, p. 95, pl. 33; p. 99, pl. 34.

THE BRUH.

1. Adult — Pres. Sumatra. C. P. Galetti.

996. Macacus rhesus (Audebert).

Simia rhesus Audeb., Hist. Nat. Singes, 2e Fam., 1797, p. 5, pl. I.

Simia erythræa Schreb., Shaw's Gen. Zoöl., I, 1800, p. 33.

Macacus (Pithex) oinops Hodgs., Jour. Asiat. Soc. Beng., 1840, IX, p. 1212.

Macacus rhesus Anders., Anat. & Zoöl. Res., 1878, p. 55.

BENGAL MONKEY.

1–2. Adult — Exch. Central Park Menagerie. Am. Mus. Nat. Hist. N. Y.

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Genus 331. **Cercocebus.**

Cercocebus Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 97. Type *Cercocebus fuliginosus* E. Geoffroy.

997. Cercocebus fuliginosus Geoffroy.

Simia æthiops Audeb., Hist. Nat. Singes, 4me Fam., 1797, pl. 9. (nec Linn.)

Cercocebus fuliginosus E. Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 97.

Cercopithecus fuliginosus F. Cuv., Hist. Nat. Mamm., 2e Ed., 1833, p. 73, pl. 25.

SOOTY MANGABEY.

1. Adult ♀ Exch. Central Park Menagerie. Am. Mus. Nat. Hist. N. Y.
2. Adult ♀ Pres. Barnum & Bailey Menagerie.

Genus 332. **Cercopithecus.**

Cercopithecus Gronov., Zooph., I, 1763, p. 5. Brünn., Zool. Fund., 1772, p. 34. Erxl., Syst. Reg. Anim., 1777, p. 22. Type *Cercopithecus mona* Schreber.

Cebus Rafin., Analyse de la Nature, 1815, p. 53. (nec. Erxl.)

Monichus Oken, Lehrb. Naturg., 3 ter Theil, Zool., 2te Abth., 1816, pp. XI, 1208–1211.

Aethiops Martin, Gen. Introd. Nat. Hist. Mamm. Anim., 1841, p. 506.

Miopithecus I. Geoff., Compt. Rend. Paris, XV, 1842, p. 720.

Diademia Reich., Vollst. Naturg. Affen, 1862, p. 107, pls. XVIII, XIX, figs. 262–270. (nec. Schum., 1817, Crust.)

Mona Reich., Vollst. Naturg. Affen, 1862, p. 109, pls. XIX–XX, figs. 271–282.

Diana Trouess., Rev. Mag. Zool., 3me Sér., VI, 1878, p. 124. (nec Risso, 1826, Pisces.)

Rhinostictus Trouess., Cat. Mamm. Viv. et Foss., I, 1897, p. 17.

Erythrocebus Trouess., Cat. Mamm. Viv. et Foss., I, 1897, p. 19.

Otopithecus Trouess., Cat. Mamm. Viv. et Foss., I, 1897, p. 22.

Pogonocebus Trouess., Cat. Mamm. Viv. et Foss., Suppl., Pt. I, 1904, p. 14.

Subgenus A. **Cercopithecus.**

998. Cercopithecus callitrichus I. Geoffroy.

Le Callitriche F. Cuv., Nat. Hist. Mamm., I, 1824, pl. XXI.

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Cercopithecus callitrichus I. Geoff., Cat. Primates, 1851, p. 23. Elliot, Check-L. Mamm. N. Amer. Cont. & W. Indies, F. C. M. Pub., VI, 1905, p. 536. Zoöl. Ser.

GREEN MONKEY.

1. Adult ♀ Exch. Central Park Menagerie, N. Y. Am. Mus. Nat. Hist. N. Y.
2. Juv. ♀ Exch. Central Park Menagerie, N. Y. Am. Mus. Nat. Hist. N. Y.

Subgenus B. **Rhinostictus.**

999. Cercopithecus cephus (Linnæus).

Simia cephus Linn., Syst. Nat., I, 1758, p. 17; I, 1766, p. 39.
Moustac F. Cuv., Hist. Nat. Mamm., I, 1821, tab. 19.
Cercopithecus cephus Wagn., Schreb. Säugth., Suppl., V, 1855, p. 49. Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 20.

MOUSTACHE MONKEY.

1. Adult ♂ P. Benito River, West Africa. G. L. Bates.

1000. Cercopithecus nictitans (Linnæus).

Simia nictitans Linn., Syst. Nat., I, 1766, p. 40.
Cercopithecus nictitans Erxl., Syst. Regn. Anim., 1777, p. 35.
Lasiopyga nictitans Illig., Prodr. Syst. Mamm. et Av., 1811, p. 68.
Cercopithecus martini Waterh., Proc. Zoöl. Soc., 1838, p. 58; 1841, p. 71.

THE HOCHEUR.

1. Adult ♂ P. Benito River, West Africa. G. L. Bates.

Subgenus C. **Monichus.**

1001. Cercopithecus neglectus Schlegel.

Cercopithecus neglectus Schleg., Mus. Pays-Bas, XII, 1876, p. 70.
Cercopithecus brazzæ A. Milne-Edw., Rev. Scien., XII, 1886, p. 15. Sclat., Proc. Zoöl. Soc., 1893, p. 255.

BRAZZA'S MONKEY.

1. Adult — Exch. "Haut Oubanguin," Africa. Nat. Hist. Mus. Paris. Viancin.

Subgenus D. **Otopithecus.**

1002. Cercopithecus erxlebeni Pucheran.

Cercopithecus erxlebeni Pucher., Rev. Mag. Zool., 1856, p. 96.

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Gray, Proc. Zoöl. Soc., 1868, p. 182. Sclat., Proc. Zoöl. Soc., 1871, p. 36; 1893, p. 254.

ERXLEBEN'S MONKEY.

1. Adult ♂ P. Efulen Bulu Country, Cameroon, W. Africa. G. L. Bates.

FIG. LXXXIX. NASALIS LARVATUS. PROBOSCIS MONKEY.

Subfamily II. **Presbytinæ.**

Genus 333. **Nasalis.**

Nasalis Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 90. Type *Cercopithecus larvatus* Wurmb.

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Rhinalazon Glog., Hand-u. Hilfsb. Naturg., I, 1841, pp. XXVII, 36.
Rhynchopithecus Dahlb., Zool. Stud., I, Andra Häftet, 1857, pp. 83, 91–94, Tab. IV.

1003. Nasalis larvatus (Wurmb).

Cercopithecus larvatus Wurmb, Mag. Neuste Phys. u. Nat., II, 1784, p. 7. E. Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 12.
Simia nasica F. Cuv., Dict. Scien. Nat., XX, 1821, p. 32.
Nasalis recurvus Vig. & Horsf., Zoöl. Jour., IV, 1828–29, p. 109, fig. juv.
Rhynchopithecus larvatus Dahlb., Zool., Stud. I, Andra Häftet, 1857, p. 93.

PROBOSCIS MONKEY.

1–4. Adult ♂ Group. Pres. Borneo. Martin A. Ryerson. Bourns & Worcester.
5–6. Adult ♀ Pres. Borneo. Martin A. Ryerson. Bourns & Worcester.
7. Juv. ♀ Pres. Borneo. Martin A. Ryerson. Bourns & Worcester.
8. Juv. — P. Borneo. Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 334. *Presbytis.

Presbytis Esch., Kotz. Entd.-Reise Süd See u. n. Ber.-Strass., III, 1821, p. 196, pl. Type *Presbytis mitrata* Eschscholtz.
Semno-pithèque F. Cuv., Hist. Nat. Mamm., III, 1821, livr. XXX, pl. text. (nec Latin.)
Semnopithecus F. Cuv., Dents. Mamm., 1825, p. 247, pl. 4.
Trachypithecus Reichenb., Vollst. Naturg. Affen, 1862, p. 89, pls. XV, XVI, figs. 198–225.
Corypithecus Trouess., Rev. Mag. Zool., 3me Sér., VII, 1879, p. 53.
Lophopithecus Trouess., Rev. Mag. Zool., 3me Sér., VII, 1879, p. 53.
Presbypithecus Trouess., Rev. Mag. Zool., 3me Sér., VII, 1879, pp. 52, 56.

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* There is no question as to the priority of *Presbytis* over *Semnopithecus*, for although Cuvier called it *Semnopitheque* in 1821, it was not Latinized until 1825, thus giving *Presbytis* four years' priority.

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Subgenus A. **Lophopithecus.**

1004. Presbytis femoralis (Horsfield).

Simia maura Raffles, Trans. Linn. Soc., XIII, 1821, p. 247. (nec Schreber.)

Semnopithecus femoralis Horsf., Life Raffles, 1830, Append., p. 644.

Semnopithecus chrysomelas Mull. & Schleg., Tijds. N. Geschied., V., 1838, p. 138, pl.

Semnopithecus sumatranus Mull. & Schleg., Verhandl., 1839–44, pp. 6, 73, pl. 10 bis, fig. 1.

THE LOTONG.

1. Adult — P. "Malacca." Ward's Nat. Scien. Establ., Rochester, N. Y.

a. Presbytis femoralis cruciger (Thomas).

Semnopithecus cruciger Thos., Ann. Mag. Nat. Hist., X, 1892, p. 475. *Id.* Proc. Zoöl. Soc., 1893, p. 3.

THOMAS'S LOTONG.

1. Adult — P. Batang Lupar, Sarawak, Borneo. A. Everett.

1005. Presbytis sabanus (Thomas).

Semnopithecus sabanus Thos., Ann. Mag. Nat. Hist., XII, 1893, p. 230, pl. VII.

PAITAN LOTONG

1. Adult — P. North Borneo. E. Gerrard & Sons.

1006. Presbytis hosii (Thomas).

Semnopithecus hosei Thos., Proc. Zoöl. Soc., 1889, p. 159, pl. XVI.

HOSE'S MONKEY.

1. Adult ♀ P. Kina Balu, N. W. Borneo. A. Everett.

Subgenus B. **Trachypithecus.**

1007. Presbytis cristatus (Raffles).

Simia cristatus Raffles, Trans. Linn. Soc., XIII, 1821, p. 245.

Semnopithecus pruinosus Desm., Mamm., 1820, Suppl., p. 333.

Semnopithecus cristatus Horsf., Life Raffles, 1830, App., p. 642.

Semnopithecus rutledgii Anders., Zoöl. Yunnan, 1878, p. 39.

CHINGKAU.

1. Adult ♀ P. Borneo. Menage Scientific Exp. Bourns & Worcester.
2. Adult — P. Borneo. Menage Scientific Exp. Bourns & Worcester.
3. Adult — P. Telok Betong, South Sumatra. W. Danne.

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Subgenus C. **Presbypithecus.**

1008. Presbytis johni (Fischer).

Simia johnii Fisch., Syn. Mamm., I, 1829, p. 25.

Semnopithecus cucullatus I. Geoff., Voy. Bélang., 1834, pp. 38, 72, pl. I.

Presbytis cephalopterus Blyth, Jour. Asiat. Soc. Beng., XIII, 1844, p. 469.

Semnopithecus jubatus Wagn., Schreb. Säugth., Suppl., I, 1840, p. 305.

JOHN'S MONKEY.

1. Adult — P. "India." Ward's Nat. Scien. Establ., Rochester, N. Y.

1009. Presbytis fusco-murina Elliot.

Presbytis fusco-murina Elliot, Proc. Biol. Soc. Wash., XIX, 1906, p. 49.

MOUSE-COLORED MONKEY.

1. Adult — Type. P. Telok Betong, South Sumatra. W. Danne.

Subgenus D. **Semnopithecus.**

1010. Presbytis entellus (Dufresne).

Simia entellus Dufresne, Bull. Soc. Philom., 1797, p. 49.

Semnopithecus entellus Blyth, Jour. Asiat. Soc. Beng., XIII, 1844, p. 470.

Semnopithecus anchises Elliot, in Blyth, Jour. Asiat. Soc. Beng., XIII, 1844, p. 470.

THE LANGUR.

1. Adult — P. "India." Ward's Nat. Scien. Establ., Rochester, N. Y.

Genus 335. **Colobus.**

Colobus Illig., Prodr. Syst. Mamm. et Av., 1811, p. 69. Type *Simia polycomos* Schreber.

Colobolus Gray, Lond. Med. Repos., XV, 1821, p. 298.

Guereza Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, pp. 5, 19.

Tropicolobus Rocherb., Faun. Sénégamb., Suppl. Vert., 1st fasc., 1886–87, p. 102, pls. II, XXVIII.

Piliocolobus Rocherb., Faun. Sénégamb., Suppl. Vert., 1st fasc., 1886–87, p. 105, pls. III–VI.

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Stachycolobus Rocherb., Faun. Sénégamb., Suppl. Vert., 1st fasc., 1886–87, p. 114, pl. VII.
Pterycolobus Rocherb., Faun. Sénégamb., Suppl. Vert., 1st fasc., 1886–87, p. 125, pl. X.
Pterygocolobus Trouess., Cat. Mamm. Viv. et Foss., I, 1897, p. 95.

Subgenus A. **Guereza.**

1011. Colobus guereza Rüppell.

Colobus guereza Rüpp., Neue Wirbelth., Säugth., 1835, p. 1, pl. 1.
Guereza ruppellii Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 19.

FIG XC. COLOBUS GUEREZA. THE GUEREZA.

THE GUEREZA.

* 1. Adult ♂ P. Abyssinia. P. H. G. Powell-Cotton.
* 2. Juv. ♂ P. Abyssinia. P. H. G. Powell-Cotton.

† The specimens procured by Mr. Powell-Cotton have the tail for more than basal half dark gray, and but little white on the buttocks. One is a fully adult male, the other young. Although appearing so different from typical *guereza* in these respects, for lack of material for comparison I leave them under that name.

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3. Adult — P. Abyssinia. Ward's Nat. Scien. Establ., Rochester, N. Y.

1012. Colobus angolensis Sclater.

Colobus angolensis Sclat., Proc. Zoöl. Soc., 1860, p. 245.

ANGOLA COLOBUS.

1. Adult — P. Angola, W. Africa. E. Gerrard & Sons.

Family VII. **Hylobatidæ. Gibbons.**

Genus 336. **Hylobates.**

Hylobates Illig., Prodr. Syst. Mamm. et Av., 1811, p. 67. Type *Simia lar* = *Homo lar* Linnæus.

Laratus Gray, Lond. Med. Repos., xv, 1821, p. 297.

Cheiron Burnett, Quart. Jour. Scien. Lit. & Art, xxvi, 1828, p. 307.

Symphalangus Glog., Hand-u. Hilfsb. Naturg., i, 1841, pp. xxvii, 34.

Syndactylus Boit., Jard. Plant. Paris, 1842, p. 55.

Siamanga Gray, List Spec. Mamm. Brit. Mus., 1843, pp. xvii, 1.

Subgenus A. **Hylobates.**

1013. Hylobates agilis E. Geoffroy & F. Cuvier.

Hylobates agilis E. Geoff. & F. Cuv., Hist. Nat. Mamm., 1850, p. 874.

SUMATRAN WOU-WOU.

1. Adult — P. Telok Betong, South Sumatra. W. Danne.

1014. Hylobates leuciscus (Schreber).

Simia leuciscus Schreb., Säugth., i, 1775, pl. cxi B.

Hylobates leuciscus Kuhl, Beit. Zool., 1820, p. 6.

Hylobates mulleri Martin, Intr. Nat. Hist. Quad., 1841, p. 144.

Hylobates concolor Müll., Verhandl. Zoogd. Ind. Arch., 1841, p. 48. (nec Harlan.)

THE WOU-WOU.

1. Adult — P. Java. Ward's Nat. Scien. Establ., Rochester, N. Y.

2–3. Adult ♀ P. Kina Balu, N. Borneo. A. Everett.

4. Adult ♀ P. Sarawak, N. Borneo. A. Everett.

5. Adult — P. Borneo. Menage Scientific Exped. Bourns & Worcester.

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FIG. XCI. HYLOBATES LAR. GIBBON.

Subgenus B. **Siamanga.**

1015. Hylobates syndactylus (Desmarest).

Pithecus syndactylus Desm., Mamm., 1820, p. 531.

Simia syndactyla Raffles, Trans. Linn. Soc., XIII, 1822, p. 241.

Siamanga syndactyla Gray, Cat. Monkeys, Lemurs & Fruit-eating Bats Brit. Mus., 1870, p. 9.

THE SIAMANG.

1. Adult — P. Sumatra. Ward's Nat. Scien. Establ., Rochester, N. Y.

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Family VIII. **Simiidæ.**

Genus 337. **Pongo. Orang-utan.**

Pongo Lacépèd., Tabl. Mamm., 1799, p. 4. Type *Pongo borneo* Lacépède=*Simia pygmæus* Linnæus.

Pithecus G. Cuv., Tabl. Élément. Hist. Nat. Anim., 1798, p. 95. *Id.* Leçons Anat. Comp., 1800, tab. I. (nec Geoff. & Cuv., 1795.)

Lophotus Fish., Zoogn., II, 1813, pp. IX, 547.

Faunus Oken, Lehrb. Naturg., 3ter Theil, Zool., 2te Abth., 1816, pp. XI, 1227. (nec Montfort, 1810, Mollusca.)

Macrobates Billb., Syn. Faun. Scandin., I, Mamm., 1828, Conspectus A.

a. *Pongo pygmæus pygmæus* (Linnæus).

Simia pygmæus Linn., Amœnit. Acad., 1763, p. 69.

Simia satyrus Linn., Syst. Nat., I, 1766, p. 34. (nec 1758, p. 25.)

Simia agrias Schreb., Säugth., I, 1774, Taf. 2c. (dimorphic.)

Pongo pygmæus pygmæus Roths., Proc. Zoöl. Soc., II, 1904, p. 436.

ORANG-UTAN.

1. Adult ♂ Pres. Borneo. Martin A. Ryerson. Bourns & Worcester.
2. Adult ♀ Pres. Borneo. Martin A. Ryerson. Bourns & Worcester.
3. Juv. ♂ Pres. Borneo. Martin A. Ryerson. Bourns & Worcester.
4. Juv. ♀ Pres. Borneo. Martin A. Ryerson. Bourns & Worcester.

5–6. Juv. — Pres. Borneo. Martin A. Ryerson. Bourns & Worcester.

Genus 338. **Simia. Chimpanzees.**

Simia Linn., Syst. Nat., I, 1758, p. 25. Type *Simia satyrus* Linnæus.

Troglodytes E. Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 87. (nec Vieillot, 1806, Ornith.)

Pan Oken, Lehrb. Naturg., 3ter Theil, Zool., 2te Abth., 1816, pp. XI, 1230.

Mimetes Leach, Thomson's Ann. Philos., XVI, 1820, p. 104.

Theranthropus Brookes, Cat. Anat. Zoöl. Mus. J. Brookes, Lond., 1828, p. 28.

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Anthropopithecus Blainv., Ann. Françe et Étrang. d'Anat. et Physiol., Paris, II, 1838, p. 380.

Hylanthropus Glog., Hand-u. Hilfsb. Naturg., I, 1841, pp. XXVII, 34.

Pseudanthropus Reichenb., Fortsetz. vollst. Naturg., 1860. *Id.* Vollst. Naturg. Affen, 1862, pp. 191-194, Taf. XXXIV, XXXVII, figs. 493–494, XXXVIII, fig. 501.

Engeco Haeckel, Gen. Morph. Organism., II, 1866, pp. CL, footnote. CLX.

FIG. XCII. SIMIA P. CHIMPANSE. CHIMPANZEE.

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Pongo Haeckel, Gen. Morph. Organism., II, 1866, p. CL. (nec Lacèp., 1799.)

1016. Simia satyrus Linnæus.

Simia satyrus Linn., Syst. Nat., I, 1758, p. 25. (nec 1766, p. 34.) Roths., Proc. Zoöl. Soc., II, 1904, p. 422.

Simia troglodytes Gmel., Syst. Nat., 1788, p. 26.

Troglodytes niger Geoff., Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 87.

Troglodytes tschego Duvern., Arch. Mus. Hist. Nat. Paris, VIII, 1855, p. 8.

Troglodytes calvus Du Chaillu, Proc. Bost. Soc. Nat. Hist., VII, 1861, p. 296.

THE TSCHEGO.

1. Adult — P. Congo, West Africa. Roland Ward & Co.

1017. Simia pygmæus Schreber.

Simia pygmæus Schreb., Säugth., III, 1777, p. 432, fig. 113. Roths., Proc. Zoöl. Soc., II, 1904, p. 430.

SMALL CHIMPANZEE.

1. Adult ♂ P. Fernan Vaz, Gaboon, West Africa. Deyrolle Fils.

a. Simia pygmæus chimpanse (Mayer).

Satyrus chimpanse Mayer, Arch. Naturg., XXII, 1856, p. 282.

Simia chimpanse Matsch., Sitzungsb. Ges. Naturf. Freunde Berlin, 1900, pp. 77–85; 1904, pp. 55–69.

Simia pygmæus chimpanse Roths., Proc. Zoöl. Soc., II, 1904, p. 428.

CHIMPANZEE.

1. Juv. ♀ Pres. West Africa. Ringling Bros.

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BY

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